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By RAY CUMMINGS

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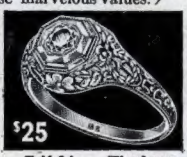

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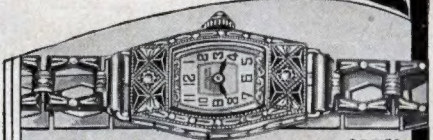

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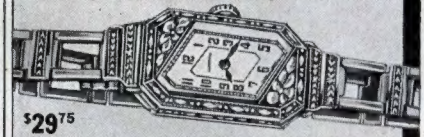

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F K 61 . . . The new, nationally advertised, **Benrus "Sweetheart"** guaranteed dependable 15-jewel shock-proof **Benrus** movement; beautifully hand engraved, dainty case; protection seal keeps out dust. Engraved, open-link bracelet. Greatly reduced from former price. *Only* $2.88 *a Month.*

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F K 64 . . . Nationally advertised **Waltham** or **Elgin**; guaranteed accurate and dependable. Engraved rugged case. Handsomely engraved, latest style, open link, bracelet to match. Great value! $2.10 *a Month.*

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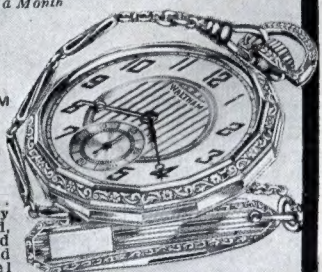
F K 65 . . . Let the watch that timed the greatest air flight in history record the flight of time for you. Guaranteed, dependable, 15-jewel **Bulova** movement fitted in handsomely engraved, modern design, **Bulova** quality sturdy case, luminous hands and dial. *Only* $3.65 *a Month*



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F K 19 . . . Nationally advertised, tested and regulated 15-jewel **Waltham** movement; 20-year warranted, engraved White Gold Filled, 12 size, thin model, decagon case. Knife and fine Waldemar chain to match. All complete in handsome gift case. Our most popular watch combination. *Only* $2.65 *a Mo.*

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★ (NEWS ITEM)

On the very threshhold of international fame and fortune, Jeanne Williams wants a new "Stage Name." Young—graceful—talented; her beautiful body is vibrant with the magnetic glow of youthful personality. Critics say her performances are "Sensational", "Exotique", and that she is at the door of stardom. . . . Now, because her name is similar to that of another star of Broadway, she wants a NEW name by which she will be featured and which she hopes to carry to fame.

We Will Pay $500.00 Just for a Girl's Name

The Delight of Dancing Feet
. . . Do your feet ache, itch, perspire or burn? Then try this famous Foot Balm that has brought delight to the over-worked feet of professional dancers.

COSTS NOTHING TO WIN

Nothing to Buy—Nothing to Sell—No Entrance Fees—No "Number Paths" nor "Guessing" to Win This Cash Prize

JUST SUGGEST A GIRL'S NAME

What an amazing opportunity! You may win this big cash prize in only a moment's time. Simply send us a name for this graceful young dancer—*nothing more to do.* Sound easy? It *is* easy! The first name that comes to your mind this minute may be the very one to win $500.00 cash. It does not have to be a "fancy" name—just some simple name that is easy to say and easy to remember—a name that will look well in blazing electric lights in front of the nation's finest theatres. Think of a name—send it Today—Win $500.00 Cash—qualify for $3,000.00 opportunity.

NO WAY YOU CAN LOSE . . . .

Simply suggest the winning name—that is all you have to do to get the $500.00. We are giving the prize to advertise our marvelous Foot Balm that is even now used by many professional dancers. Because a famous name is valuable in advertising, the new name chosen for this rising young dancer will also be used as the name for our Foot Balm—her fame will bring us big advertising. . . . It is your opportunity of a life-time. Maybe your own name, or the name of a friend may be the very name we want. Nothing for you to lose—a *fortune* for you to win.

JUST SENDING A NAME QUALIFIES YOU FOR OPPORTUNITY TO

Win $3,000.00

OR BUICK 8 CYLINDER SEDAN AND $1,500.00 IN CASH BESIDES

This money is entirely *separate and in addition* to the prize for the Dancer's Name. Over 50 huge cash prizes—3 fine automobiles. Think of it! You may win *over $3,000.00 cash or a new Buick 8 Cylinder Sedan and $1,500.00 Cash besides!* What a magnificent fortune! Some one is going to get it—why not you? You have just as good an opportunity to win as anyone. Suggest a name for the Dancer. Do it now—it may mean a *fortune* for you.

$1,000.00 CASH CERTIFICATE

Will Be Sent to You At Once—BE PROMPT

One thousand dollars EXTRA if you are PROMPT and win first prize. So don't delay! Send your name suggested *promptly*—nothing more to do now or ever toward getting the Name Prize and to qualify for the opportunity to win the other huge prizes. *You can't lose anything*—EVERY PERSON WHO TAKES AN ACTIVE PART WILL BE REWARDED IN CASH. *I will send you a $1,000.00 Cash Certificate as soon as your name is received*—I will tell you just how you stand in the distribution of over $5,000.00 in cash prizes and fine new automobiles.

Hundreds Have Won

Viola Lauder, Oregon, was destitute—her home burned down. She suggested a name for our toilet soap and won a big cash prize of $900.00! H. L. Adams, Pa., won over $2000.00. Hundreds of others made happy by big prizes and rewards. Now, some yet unknown person is going to win $3,000.00 cash; many others are going to be made happy with scores of prizes as high as $750.00. Three fine cars will be given.

Read These Simple Rules

Contest open to all except employees of our company. Only one name may be submitted—sending more than one name will cause all names sent by you to be thrown out. Suggest a first and last name for the dancer. Contest closing date given in my first letter to you. In case of duplicate winning names, duplicate prizes will be given. Every person submitting a name qualifies for opportunity to win $3,000.00 cash or Buick 8 Cylinder Sedan and $1,500.00 in cash. Use the coupon or write a letter to submit name and receive all details.

WALTER BRENT, Mgr.

906 Sycamore Street Dept. 816-PP Cincinnati, Ohio

Winning Name Coupon

WALTER BRENT, Mgr.,
906 Sycamore St., Dept. 815-PP, Cincinnati, Ohio.

The Name I suggest for the Dancer is:_____

_____

Name_____

Address_____

City_____ State_____

Rush me the $1,000.00 Cash Certificate for Promptness and tell me how I stand for Winning $3,000.00 cash.

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Government Secret Service Work is one of the most fascinating branches of the Service. These positions located throughout the country are both traveling and stationary. Salaries up to $5,000 yearly, and all traveling expenses paid while on the road.

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The duties are to check and inspect goods brought into this country, levy the duties, etc., and see that Customs Regulations are not violated. This is very fascinating work with splendid salaries.

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I'll Train You at Home in Your Spare Time for RADIO · TELEVISION · TALKING MOVIES

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Spare time set servicing is paying N. R. I. men $200 to $1000 a year. Full time men are making as much as $65, $75 and $100 a week.

Broadcasting Stations

Need trained men continually for jobs paying $1200 to $5000 a year.

Ship Operating

Radio operators on ships see the world free and get good pay plus expenses.

Aircraft Radio

Aviation is needing more and more trained Radio men. Operators employed through Civil Service Commission earn $2000 to $2500 a year.

Talking Movies

An invention made possible by Radio. Offers many fine jobs to well-trained Radio men, paying $75 to $200 a week.

Television

The coming field of many great opportunities is covered by my course.

IF YOU are earning a penny less than $50 a week, send for my book of information on the opportunities in Radio. It is free. Clip the coupon NOW. Why be satisfied with $25, $30 or $40 a week for longer than the short time it takes to get ready for Radio?

Radio's growth opening hundreds of $50, $75, $100 a week jobs every year

In about ten years Radio has grown from a $2,000,000 to a $1,000,000,000 industry. Over 800,000 jobs have been created. Hundreds more are being opened every year by its continued growth. Men and young men with the right training—the kind of training I give you—are stepping into Radio at two and three times their former salaries. J. A. Vaughn, 4075 S. Grand Boulevard, St. Louis, Mo., writes: "Before I entered Radio I was making $35 a week. Last week I earned $110 selling and servicing sets. I owe my success to N. R. I."

You have many jobs to choose from

Broadcasting stations use engineers, operators, station managers and pay $1,200 to $5,000 a year. Manufacturers continually need testers, inspectors, foremen, engineers, service men, buyers, for jobs paying up to $7,500 a year. Shipping companies use hundreds of Radio operators, give them world-wide travel with board and lodging free and a salary of $80 to $150 a month. Dealers and jobbers employ service men, salesmen, buyers, managers, and pay $30 to $100 a week. There are many other opportunities too.

So many opportunities many N. R. I. men make $200 to $1000 while learning

The day you enroll with me I'll show you how to do 28 jobs, common in most every neighborhood, for spare time money. Throughout your course I send you information on servicing popular makes of sets; I give you the plans and ideas that are making $200 to $1,000 for hundreds of N. R. I. students in their spare time while studying. My course is famous as the one that pays for itself. G. W. Page, 2210 Eighth Ave., S., Nashville, Tenn., writes: "I picked up $935 in my spare time while taking your course."

5 Give You 9 Outfits of Radio Parts for Practical Home Experiments

You can build over 100 circuits with these outfits. You build and experiment with the circuits used in Crosley, Atwater Kent, Eveready, Majestic, Zenith and other popular sets. You learn how these sets work, why they work, how to make them work. This makes learning at home easy, fascinating, practical.

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Special training in Talking Movies, Television and home Television experiments, Radio's use in Aviation, Servicing and Merchandising Sets, Broadcasting, Commercial and Ship Operating are included. I am so sure that I can train you satisfactorily that I will agree in writing to refund every penny of your tuition if you are not satisfied with my Lessons and Instruction Service upon completing.

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Dear Mr. Smith: Send me your free 64-page book "Rich Rewards in Radio." I understand this does not obligate me and that no salesman will call.

Name.....

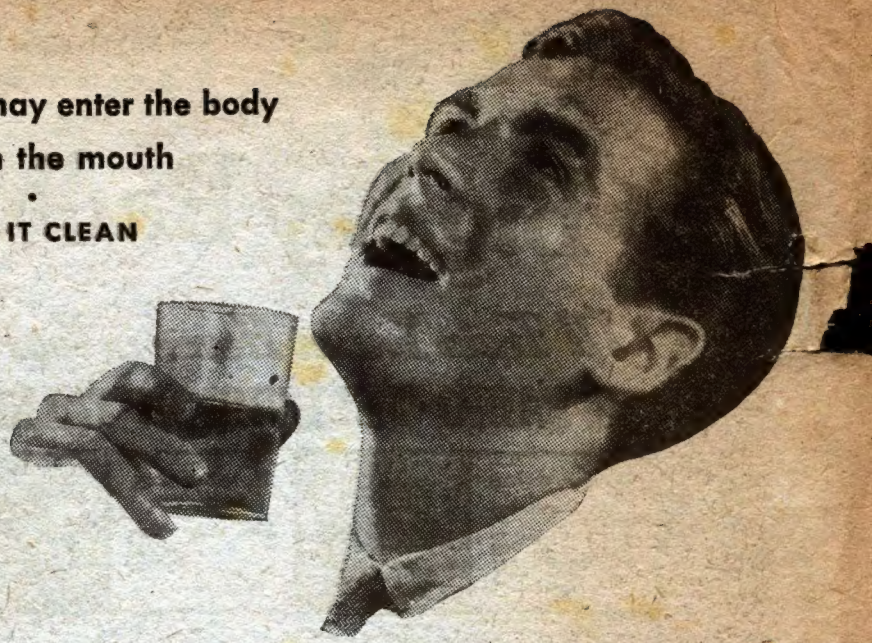
Address.....

City.....*State*.....

29 diseases may enter the body through the mouth

•

KEEP IT CLEAN



For colds and irritated throats

Gargle with the SAFE antiseptic

Make sure that the mouth wash you use kills germs. But make doubly sure that it does not irritate tender tissues with which it comes in contact. Mouth washes so harsh as to require dilution may irritate tissue and thereby make it easier for germs to gain entrance to the body. Such irritation also slows up nature's processes of recovery.

Safety wins acclaim

There can be no question of Listerine's safety and its germicidal power. Both have won the commendation of the medical profession. Its entire reputation as an aid in preventing and remedying colds and associated sore throats is based upon these two properties.

If you compare the product itself and its results with ordinary mouth washes and their results, its superiority is at once apparent.

Aid in preventing colds

To keep the mouth healthy, gargle with Listerine twice a day at least. It is a precaution against colds, other mouth infections, and bad breath. When you feel a cold coming on increase the frequency of the gargle to from three to five times a day. That often nips the cold at the outset or checks its severity. Millions realize this.

Half as many colds for garglers

Controlled laboratory tests contribute further proof of Listerine's ability to prevent infection.

Of 102 persons under medical supervision for a period of sixty days, one-third, called "controls" did not gargle Listerine; one-third gargled twice a day; one-third gargled five times a day. Note these amazing results:

Colds less severe

The group that gargled twice a day contracted only half as many colds as those who did not gargle at all. The group that gargled five times a day contracted one-third as many. And in both groups the colds contracted were less severe and of shorter duration than in the group that did not gargle.

These scientifically controlled tests, performed on average people under average conditions, definitely indicate the high value of Listerine in arresting infection.

Keep Listerine handy in home and office. Gargle with it twice a day at least. It keeps not only your mouth but your breath clean. Lambert Pharmacal Company, St. Louis, Mo., U. S. A.

reduces risk of COLDS 50%, tests show

I caught his hand and pulled him to safety.

Out Around Rigel

By Robert H. Wilson

THE sun had dropped behind the Grimaldi plateau, although for a day twilight would linger over the Oceanus Procellarum. The sky was a hazy blue, and out over the deeper tinted waves the full Earth swung. All the long half-month it had hung there above the horizon, its light dimmed by the sunshine, growing from a thin crescent to its full disk three times as broad as that of the sun at setting. Now in the dusk it was a great silver lamp hanging over Nardos, the Beautiful, the City Built on the Water. The light glimmered over

An astounding chronicle of two Lunarians' conquest of time and interstellar space.

the tall white towers, over the white ten-mile-long adamantine bridge running from Nardos to the shore, and lit up the beach where we were standing, with a brightness that seemed almost that of day.

"Once more, Garth," I said. "I'll get that trick yet."

The skin of my bare chest still smarted from the blow of his wooden fencing sword. If it had been the real two-handed Lunarian dueling sword, with its terrible mass behind a curved razor edge, the blow would have produced a cut deep into the bone. It was always the same, ever since Garth and I had fenced as boys with crooked laths. Back to back, we could beat the whole school, but I never had a chance against him. Perhaps one time in ten—

"On guard!"

The silvered swords whirled in the Earth-light. I nicked him on one wrist, and had to duck to escape his wild swing at my head. The wooden blades were now locked by the hilts above our heads. When he stepped back to get free, I lunged and twisted his weapon. In a beautiful parabola, Garth's sword sailed out into the water, and he dropped to the sand to nurse his right wrist.

"Confound your wrestling, Dunal. If you've broken my arm on the eve of my flight—"

"It's not even a sprain. Your wrists are weak. And I supposed you've always been considerate of me? Three broken ribs!"

"For half a cent—"

HE was on his feet, and then Kelvar came up and laid her hand on his shoulder. Until a few minutes before she had been swimming in the surf, watching us. The Earth-light shimmered over her white skin, still faintly moist, and blazed out in blue sparkles from the jewels of the breastplates and trunks she had put on.

When she touched Garth, and he smiled, I wanted to smash in his dark face and then take the beating I would deserve. Yet, if she preferred him— And the two of us had been friends before she was born. I put out my hand.

"Whatever happens, Garth, we'll still be friends?"

"Whatever happens."

We clasped hands.

"Garth," Kelvar said, "it's getting dark. Show us your ship before you go."

"All right." He had always been like that—one minute in a black rage, the next perfectly agreeable. He now led the way up to a cliff hanging over the sea.

"There," said Garth, "is the *Comet*. Our greatest step in conquering distance. After I've tried it out, we can go in a year to the end of the universe. But, for a starter, how about a thousand light-years around Rigel in six months?" His eyes were afire. Then he calmed down. "Anything I can show you?"

I HAD seen the *Comet* before, but never so close. With a hull of shining helio-beryllium—the new light, inactive alloy of a metal and

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Editor's Note: The manuscript, of which a translation is here presented, was discovered by the rocket-ship expedition to the moon three years ago. It was found in its box by the last crumbling ruins of the great bridge mentioned in the narrative. Its final translation is a tribute at once to the philological skill of the Earth and to the marvelous dictionary provided by Dunal, the Lunarian. Stars and lunar localities will be given their traditional Earth names; and measures of time, weight, and distance have been reduced, in round numbers, to terrestrial equivalents. Of the space ship described, the *Comet*, no trace has been found. It must be buried under the rim of one of the hundreds of nearby Lunar craters—the result, as some astronomers have long suspected and as Dunal's story verifies, of a great swarm of meteors striking the unprotected, airless moon.

a gas—the ship was a cylinder about twenty feet long, by fifteen in diameter, while a pointed nose stretched five feet farther at each end. Fixed in each point was a telescopic lens, while there were windows along the sides and at the top—all made, Garth informed us, of another form of the alloy almost as strong as the opaque variety. Running half-way out each end were four "fins" which served to apply the power driving the craft. A light inside showed the interior to be a single room, ten feet high at the center of its cylindrical ceiling, with a level floor.

"How do you know this will be the bottom?" I asked, giving the vessel a shove to roll it over. But it would not budge. Garth laughed.

"Five hundred pounds of mercury and the disintegrators are under that floor, while out in space I have an auxiliary gravity engine to keep my feet there.

"You see, since your mathematical friends derived their identical formulas for gravity and electromagnetism, my job was pretty easy. As you know, a falling body follows the line of least resistance in a field of distortion of space caused by mass. I bend space into another such field by electromagnetic means, and the *Comet* flies down the track. Working the mercury disintegrators at full power, I can get an acceleration of two hundred miles per second, which will build up the speed at the midpoint of my trip to almost four thousand times that of light. Then I'll have to start slowing down, but at the average speed the journey will take only six months or so."

"BUT can anyone stand that acceleration?" Kelvar asked.

"I've had it on and felt nothing. With a rocket exhaust shoving the ship, it couldn't be done, but my gravitational field attracts the occupant of the *Comet* just as much as the vessel itself."

"You're sure," I interrupted, "that you have enough power to keep up the acceleration?"

"Easily. There's a two-thirds margin of safety."

"And you haven't considered that it may get harder to push? You know the increase of mass with velocity. You can't take one-half of the relativity theory without the other. And they've actually measured the increase of weight in an electron."

"The electron never knew it; it's all a matter of reference points. I can't follow the math, but I know that from the electron's standards it stayed exactly the same weight. Anything else is nonsense."

"Well, there may be a flaw in the reasoning, but as they've worked it out, nothing can go faster than light. As you approach that velocity, the mass keeps increasing, and with it the amount of energy required for a new increase in speed. At the speed of light, the mass would be infinite, and hence no finite energy could get you any further."

"Maybe so. It won't take long to find out."

A few of the brightest stars had begun to appear. We could just see the parallelogram of Orion, with red Betelguese at one corner, and across from it Rigel, scintillant like a blue diamond.

"See," Garth said, pointing at it. "Three months from now, that's where I'll be. The first man who dared to sail among the stars."

"Only because you don't let anyone else share the glory and the danger."

"Why should I? But you wouldn't go, anyway."

"Will you let me?"

I had him there.

"On your head be it. The *Comet* could hold three or four in a pinch,

and I have plenty of provisions. If you really want to take the chance—"

"It won't be the first we've taken together."

"All right. We'll start in ten minutes." He went inside the ship.

"DON'T go," Kelvar whispered, coming into the *Comet's* shadow. "Tell him anything, but don't go."

"I've got to. I can't go back on my word. He'd think I was afraid."

"Haven't you a right to be?"

"Garth is my friend and I'm going with him."

"All right. But I wish you wouldn't."

From inside came the throb of engines.

"Kelvar," I said, "you didn't worry when only Garth was going."

"No."

"And there's less danger with two to keep watch."

"I know, but still. . . ."

"You are afraid for *me?*"

"I am afraid for you."

My arm slipped around her, there in the shadow.

"And when I come back, Kelvar, we'll be married?"

In answer, she kissed me. Then Garth was standing in the doorway of the *Comet.*

"Dunal, where are you?"

We separated and came out of the shadow. I went up the plank to the door, kicking it out behind me. Kelvar waved, and I called something or other to her. Then the door clanged shut. Seated before the control board at the front of the room, Garth held the switch for the two projectors.

"Both turned up," he yelled over the roar of the generators. His hands swung over and the noise died down, but nothing else seemed to have happened. I turned back again to look out the little window fixed in the door.

DOWN far below, I could see for a moment the city of Nardos with its great white bridge, and a spot that might be Kelvar. Then there was only the ocean, sparkling in the Earth-light, growing smaller, smaller. And then we had shot out of the atmosphere into the glare of the sun and a thousand stars.

On and up we went, until the moon was a crescent with stars around it. Then Garth threw the power forward.

"Might as well turn in," he told me. "There'll be nothing interesting until we get out of the solar system and I can put on real speed. I'll take the first trick."

"How long watches shall we stand?"

"Eighteen hours ought to match the way we have been living. If you have another preference—"

"No, that will be all right. And I suppose I might as well get in some sleep now."

I was not really sleepy, but only dazed a little by the adventure. I fixed some things on the floor by one of the windows and lay down, switching out the light. Through a top window the sunlight slanted down to fall around Garth, at his instrument board, in a bright glory. From my window I could see the Earth and the gleaming stars.

The Earth was smaller than I had ever seen it before. It seemed to be moving backward a litle, and even more, to be changing phase. I closed my eyes, and when I opened them again, sleepily, the bright area was perceptibly smaller. If I could stay awake long enough, there would be only a crescent again. If I could stay awake— But I could not. . . .

ONLY the rattling of dishes as Garth prepared breakfast brought me back to consciousness. I got to my feet sheepishly.

"How long have I slept?"

"Twenty hours straight. You looked as if you might have gone on forever. It's the lack of disturbance to indicate time. I got in a little myself, once we were out of the solar system."

A sandwich in one hand, I wandered over the vessel. It was reassuringly solid and concrete. And yet there was something lacking.

"Garth," I asked, "what's become of the sun?"

"I thought you'd want to know that." He led me to the rear telescope.

"But I don't see anything."

"You haven't caught on yet. See that bright yellowish star on the edge of the constellation Scorpio. That's it."

Involuntarily, I gasped. "Then—how far away are we?"

"I put on full acceleration fifteen hours ago, when we passed Neptune, and we have covered thirty billion miles—three hundred times as far as from the moon to the sun, but only one half of one per cent of a light-year."

I was speechless, and Garth led me back to the control board. He pointed out the acceleration control, now turned up to its last notch forward; he also showed me the dials which were used to change our direction.

"Just keep that star on the cross hairs. It's Pi Orionis, a little out of our course, but a good target since it is only twenty-five light-years away. Half the light is deflected on this screen, with a delicate photo-electric cell at its center. The instant the light of the star slips off it, a relay is started which lights a red lamp here, and in a minute sounds a warning bell. That indicator over there shows our approach to any body. It works by the interaction of the object's gravitational field with that of my projector, and we can spot anything sizable an hour away. Sure you've got everything?"

IT all seemed clear. Then I noticed at the top three clock-like dials; one to read days, another to record the speeds of light, and the third to mark light-years traveled.

"These can't really work?" I said. "We have no way to check our speed with outer space."

"Not directly. This is geared with clockwork to represent an estimate based on the acceleration. If your theory is right, then the dials are all wrong."

"And how long do you expect to go ahead without knowing the truth?"

"Until we ought to be at Pi Orionis. At two weeks and twenty-five light-years by the dials, if we aren't there we'll start back. By your figuring, we shouldn't be yet one light-year on the way. Anything more?"

"No, I think I can manage it."

"Wake me if anything's wrong. And look out for dark stars." Then he had left me there at the controls. In five minutes he was asleep and the whole ship was in my hands.

FOR hours nothing happened. Without any control of mine, the ship went straight ahead. I could get up and walk about, with a weather eye on the board, and never was there the flash of a danger light. But I was unable to feel confident, and went back to look out through the glass.

The stars were incredibly bright and clear. Right ahead were Betelguese and Rigel, and the great nebula of Orion still beyond. There was no twinkling, but each star a bright, steady point of light. And if Garth's indicators were correct, we were moving toward them at a speed now seventy-five times that of light itself. If they were cor-

rect. . . . How could one know, before the long two weeks were over?

But before I could begin to think of any plan, my eye was caught by the red lamp flashing on the panel. I pressed the attention button before the alarm could ring, then started looking for the body we were in danger of striking. The position indicators pointed straight ahead, but I could see nothing. For ten minutes I peered through the telescope, and still no sign. The dials put the thing off a degree or so to the right now, but that was too close. In five more minutes I would swing straight up and give whatever it was a wide berth.

I looked out again. In the angle between the cross hairs, wasn't there a slight haze? In a moment it was clear. A comet, apparently, the two of us racing toward each other. Bigger it grew and bigger, hurtling forward. Would we hit?

The dials put it up a little and far off to the right, but it was still frightening. The other light had come on, too, and I saw that we had been pulled off our course by the comet's attraction. I threw the nose over, past on the other side for leeway, then straightened up as the side-distance dial gave a big jump away. Though the gaseous globe, tailless of course away from the sun, showed as big as the full Earth, the danger was past.

AS I watched, the comet vanished from the field of the telescope. Five minutes, perhaps, with the red danger light flickering all the time. Then, with a ghastly flare through the right hand windows, it had passed us.

Garth sat straight up. "What happened?" he yelled.

"Just a comet. I got by all right."

He settled back, having been scarcely awake, and I turned to the board again. The danger light had gone out, but the direction indicator was burning. The near approach of the comet had thrown us off our course by several degrees. I straightened the ship up easily, and had only a little more difficulty in stopping a rocking motion. Then again the empty hours of watching, gazing into the stars.

Precisely at the end of eighteen hours, Garth awakened, as if the consummation of a certain number of internal processes had set off a little alarm clock in his brain. We were forty-one hours out, with a speed, according to the indicator, of one hundred and twenty-eight times that of light, and a total distance covered of slightly over one quarter of a light-year. A rather small stretch, compared to the 466 light-years we had to go. But when I went back for a look out of the rear telescope, the familiar stars seemed to have moved the least bit closer together, and the sun was no brighter than a great number of them.

I slept like a log, but awakened a little before my trick was due.

EXACTLY on schedule, fourteen days and some hours after we had started off, we passed Pi Orionis. For long there had been no doubt in my mind that, whatever the explanation, our acceleration was holding steady. In the last few hours the star swept up to the brilliance of the sun, then faded again until it was no brighter than Venus. Venus! Our sun itself had been a mere dot in the rear telescope until the change in our course threw it out of the field of vision.

At sixty-five light-years, twenty-three days out, Beta Eridani was almost directly in our path for Rigel. Slightly less than a third of the distance to the midpoint, in over half the time. But our speed was still increasing, 200 miles a

second every second, almost four times the speed of light in an hour. Our watches went on with a not altogether disagreeable monotony.

There was no star to mark the middle of our journey. Only, toward the close of one of my watches, a blue light which I had never noticed came on beside the indicator dials, and I saw that we had covered 233 light-years, half the estimated distance to Rigel. The speed marker indicated 3975 times the speed of light. I wakened Garth.

"You could have done it yourself," he complained, sleepily, "but I suppose it's just as well."

He went over to the board and started warming up the rear gravity projector.

"We'll turn one off as the other goes on. Each take one control, and go a notch at a time." He began counting, "One, two, three. . . ."

On the twentieth count, my dial was down to zero, his up to maximum deceleration, and I pulled out my switch. Garth snapped sideways a lever on the indicators. Though nothing seemed to happen, I knew that the speed dial would creep backward, and the distance dial progress at a slower and slower rate. While I was trying to see the motion, Garth had gone back to bed. I turned again to the glass and looked out at Rigel, on the cross hairs, and Kappa Orionis, over to the left, and the great nebula reaching over a quarter of the view with its faint gaseous streamers.

AND so we swept on through space, with Rigel a great blue glory ahead, and new stars, invisible at greater distances, flaring up in front of us and then fading into the background as we passed. For a long time we had been able to see that Rigel, as inferred from spectroscopic evidence, was a double star—a fainter, greener blue companion revolving with it around their common center of gravity. Beyond Kappa Orionis, three hundred light-years from the sun, the space between the two was quite evident. Beyond four hundred light-years, the brilliance of the vast star was so great that it dimmed all the other stars by comparison, and made the nebula seem a mere faint gauze. And yet even with this gradual change, our arrival was a surprise.

When he relieved me at my watch, Garth seemed dissatisfied with our progress. "It must be farther than they've figured. I'll stick at twenty-five times light speed, and slow down after we get there by taking an orbit."

"I'd have said it was nearer than the estimate," I tried to argue, but was too sleepy to remember my reasons. Propped up on one elbow, I looked around and out at the stars. There was a bright splash of light, I noticed, where the telescope concentrated the radiation of Rigel at one spot on the screen. I slept, and then Garth was shouting in my ear:

"We're there!"

I opened my eyes, blinked, and shut them again in the glare.

"I've gone around three or four times trying to slow down. We're there, and there's a planet to land on."

AT last I could see. Out the window opposite me, Rigel was a blue-white disk half the size of the sun, but brighter, with the companion star a sort of faint reflection five or ten degrees to the side. And still beyond, as I shaded my eyes, I could see swimming in the black a speck with the unmistakable glow of reflected light.

With both gravity projectors in readiness, we pulled out of our orbit and straight across toward

the planet, letting the attraction of Rigel fight against our still tremendous speed. For a while, the pull of the big star was almost overpowering. Then we got past, and into the gravitational field of the planet. We spiralled down around it, looking for a landing place and trying to match our speed with its rotational velocity.

From rather unreliable observations, the planet seemed a good deal smaller than the moon, and yet so dense as to have a greater gravitational attraction. The atmosphere was cloudless, and the surface a forbidding expanse of sand. The globe whirled at a rate that must give it a day of approximately five hours. We angled down, picking a spot just within the lighted area.

A landing was quite feasible. As we broke through the atmosphere, we could see that the sand, although blotched with dark patches here and there, was comparatively smooth. At one place there was a level outcropping of rock, and over this we hung. It was hard work, watching through the single small port in the floor as we settled down. Finally the view was too small to be of any use. I ran to the side window, only to find my eyes blinded by Rigel's blaze. Then we had landed, and almost at the same moment Rigel set. Half overlapped by the greater star, the faint companion had been hidden in its glare. Now, in the dusk, a corner of it hung ghostlike on the horizon, and then too had disappeared.

I FLASHED on our lights, while Garth cut out the projector and the floor gravity machine. The increase in weight was apparent, but not particularly unpleasant. After a few minutes of walking up and down I got used to it.

Through a stop-cock in the wall, Garth had drawn in a tube of gas from the atmosphere outside, and was analyzing it with a spectroscope.

"We can go out," he said. "It's unbreathable, but we'll be able to use the space suits. Mostly fluorine. It would eat your lungs out like that!"

"And the suits?"

"Fortunately, they've been covered with helio-beryllium paint, and the helmet glass is the same stuff. Not even that atmosphere can touch it. I suppose there can be no life on the place. With all this sand, it would have to be based on silicon instead of carbon—and it would have to breathe fluorine!"

He got out the suits—rather like a diver's with the body of metal-painted cloth, and the helmet of the metal itself. On the shoulders was an air supply cylinder. The helmets were fixed with radio, so we could have talked to each other even in airless space. We said almost anything to try it out.

"Glad you brought two, and we don't have to explore in shifts."

"Yes, I was prepared for emergencies."

"Shall we wait for daylight to go out?"

"I can't see why. And these outfits will probably feel better in the cool. Let's see."

WE shot a searchlight beam out the window. There was a slight drop down from the rock where we rested, then the sandy plain stretching out. Only far off were those dark patches that looked like old seaweed on a dried-up ocean bed, and might prove dangerous footing. The rest seemed hard packed.

My heart was pounding as we went into the air-lock and fastened the inner door behind us.

"We go straight out now," Garth explained. "Coming back, it will be necessary to press this button

and let the pump get rid of the poisonous air before going in."

I opened the outer door and started to step out, then realized that there was a five-foot drop to the ground.

"Go ahead and jump," Garth said. "There's a ladder inside I should have brought, but it would be too much trouble to go back through the lock for it. Either of us can jump eight feet at home, and we'll get back up somehow."

I jumped, failing to allow for the slightly greater gravity, and fell sprawling. Garth got down more successfully, in spite of a long package of some sort he carried in his hand.

Scrambling down from the cliff and walking out on the sand, I tried to get used to the combination of greater weight and the awkward suit. If I stepped very deliberately it was all right, but an attempt to run sank my feet in the sand and brought me up staggering. There was no trouble seeing through the glass of my helmet over wide angles. Standing on the elevation by the *Comet*, his space-suit shining in the light from the windows, Garth looked like a metallic monster, some creature of this strange world. And I must have presented to him much the same appearance, silhouetted dark and forbidding against the stars.

THE stars! I looked up, and beheld the most marvelous sight of the whole trip—the Great Nebula of Orion seen from a distance of less than one hundred and fifty light-years its own width.

A great luminous curtain, fifty degrees across, I could just take it all in with my eye. The central brilliancy as big as the sun, a smaller one above it, and then the whole mass of gas stretching over the sky. The whole thing aglow with the green light of nebulium and blazing with the stars behind it. It was stupendous, beyond words.

I started to call Garth, then saw that he was looking up as well. For almost half an hour I watched, as the edge of the nebula sank below the horizon. Then its light began to dim. Turning, I saw that the sky opposite was already gray. The dawn!

Why, the sun had just set. Then I realized. It was over an hour since we had landed, and a full night would be scarcely two hours and a half. If we were in a summer latitude, the shorter period of darkness was natural enough. And yet it was still hard to believe as, within ten minutes, it was as bright as Earth-light on the moon. Still clearer and clearer grew the light. The stars were almost gone, the center of the nebula only a faint wisp. There were no clouds to give the colors of sunrise, but a bluish-white radiance seemed to be trembling on the eastern horizon.

And then, like a shot, Rigel came up into the sky. The light and heat struck me like something solid, and I turned away. Even with my suit reflecting most of the light away, I felt noticeably warm. The *Comet* shone like a blinding mirror, so that it was almost impossible to see Garth on the plain below it. Stumbling, and shielding my eyes with my hand, I made my way toward him.

He was standing erect, in his hands two old Lunarian dueling swords. There was hate in his voice as the radio brought it in my ears.

"Dunal, only one of us is going back to the moon."

I STARED. Was the heat getting him? "Hadn't we better go inside," I said quietly and somewhat soothingly.

He made no reply, but only held

out one of the hilts. I took it dumbly. In that instant he could have struck my head from my body, if he wished.

"But, Garth, old friend—"

"No friend to you. You shall win Kelvar now, or I. I'm giving you a sporting chance. One of your light cuts letting the fluorine inside will be as deadly as anything I can do. The one who goes back will tell of an accident, making repairs out in space. Damn you, if you don't want me to kill you where you stand, come on and fight."

"Garth, you've gone mad."

"I've been waiting ever since I got you to leave the moon. On guard!"

With a rush of anger I was upon him. He tried to step back, stumbled, had one knee on the ground, then hurled himself forward with a thrust at my waist that I dodged only by an inch. I had to cover, and in spite of myself, with the cool work of parrying, my animosity began to disappear.

And so began one of the strangest battles that the Universe has seen. Lumbering with our suits and the extra gravity, we circled each other under the blazing sky. The blue-white of Rigel shimmered off our suits and the arcs of our blades as we cut and guarded—each wary now, realizing that a touch meant death. As that terrible sun climbed upward in the sky, its heat was almost overpowering. The sweat poured off every inch of my body, and I gasped for breath. And still we fought on, two glittering metal monsters under the big blue star sweeping up to its noon.

I KNEW now that I could never kill Garth. I could not go back to Kelvar with his blood. Yet if I simply defended, sooner or later he would wear me down. There was just one chance. If I could disarm him, I could wrestle him into submission. Then he might be reasonable, or I could take him home bound.

I began leading for the opening I wanted, but with no result. He seemed resolved to tire me out. Either I must carry the fight to him, or I would be beaten down. I made a wide opening, counting on dodging his slow stroke. I did, but he recovered too soon. Again on the other side, with no better result. Still again, just getting in for a light tap on Garth's helmet. Then I stepped back, with guard low, and this time he came on. His sword rose in a gleaming arc and hung high for a moment. I had him. There were sparks of clashing, locked steel.

"Damn you, Dunal!" He took a great step back, narrowly keeping his balance on the sand. On another chance, I would trip him. My ears were almost deafened by his roar, "Come on and *fight.*"

I took a step in and to the side, and had him in the sun. He swung blindly, trying to cover himself with his whirling point but I had half a dozen openings to rip his suit. When he moved to try to see, I would lock with him again. I watched his feet.

And as I watched, I saw an incredible thing. Near one of Garth's feet the sand was moving. It was not a slide caused by his weight; rather—why, it was being pushed up from below. There was a little hump, and suddenly it had burst open, and a stringy mass like seaweed was crawling toward his leg.

"Look out, Garth," I yelled.

HOW he could see through that terrible sun I do not know, but Garth swung through my forgotten guard with a blow square across my helmet glass. The force threw me to the ground, and I looked up, dazed. The beryllium glass had not broken to let in the

fluorine-filled air, but Garth was standing over me.

"That's your last trick, Dunal." His blade rose for the kill.

I was unable even to get up, but with one hand I pointed to the ground.

"Look!" I shouted again, and on the instant the thing wound itself around Garth's foot.

He swung down, hacking it loose. I had got to my feet. "Run for the ship," I cried, and started off.

"Not that way."

I looked back, and saw that I had run in the wrong direction. But it made no difference. Over a whole circle around us the sand was rising, and directly between us and the *Comet* there was a great green-brown mass. We were surrounded.

We stood staring at the creatures. Spread out to full dimensions, each one made a sphere about four feet in diameter. In the center, a solid mass whose outlines were difficult to discern; and spreading out from this a hundred long, thin, many-jointed arms or legs or branches or whatever one could call them.

The things were not yet definitely hostile—only their circle, of perhaps fifty yards radius, grew continually thicker and more impenetrable. Within the enclosed area, the only ripples we could see in the sand were heading outward. There was to be no surprise attack from below, at least; only one in mass. What, I wondered, might be a sign of friendship, to persuade them to let us go.

AND then the circle began to close in. The things rolled over and over on themselves, like gigantic tumbleweeds. At one point, to the right of the direct route to the *Comet*, the line seemed thinner. I pointed the place out to Garth.

"Break through there, and make a run for it."

We charged into the midst of them with swinging blades. The very suddenness of our rush carried us half-way through their midst. Then something had my legs from behind. I almost fell, but succeeded in turning and cutting myself free. The creatures from the other side of the circle must have made the hundred yards in four or five seconds. And the rest had now covered the breach in front. It was hopeless.

And so we stood back to back, hewing out a circle of protection against our enemies. They seemed to have no fear, and in spite of the destruction our blades worked among them, they almost overcame us by sheer numbers and weight. It was a case of whirling our swords back and forth interminably in the midst of their tentacles. Against the light, the long arms were a half-transparent brown. Our swords broke them in bright shivers. Formed from the predominant silicon of the planet, the creatures were living glass!

For perhaps a quarter of an hour we were in the thick of them, hewing until I thought my arms must fall, slashing and tearing at the ones that had got underfoot and were clamping their tentacles around our legs. Only for the spacesuits, we should have, by this time, been overpowered and torn into bits—and yet these garments could not be expected to hold indefinitely.

BUT at last there was a breathing space. The crippled front ranks dragged themselves away, and there was left around us a brief area of sand, covered with coruscating splinters of glass. Garth got the breath to say something or other encouraging. It was like old days at school.

Only this time the odds were all

against us. We were still a good hundred yards from the *Comet*, and in our path stood a solid wall of the creatures. Even if we got free, they could outrace us to the goal. And with our limited strength, we could not hope to kill them all. In a minute or two, they would attack us again.

Somehow we must fight our way as long as we lasted. Perhaps they might be frightened. We threw ourselves at the side next our goal. The line gave perhaps a yard, then stiffened, and we found ourselves swallowed up in a thick cloud of brown smoke.

Poison gas! It must be shot out of their bodies, at a cost so great that it was kept as a last resort. Through the rolling vapor it was just possible to see our opponents, but they made no forward move. They were waiting for us to be overcome. Suppose their compound could eat through even our helioberyllium? But it did not. We were safe.

"Stand still, Garth," I whispered, counting on the radio to carry my voice. "Let them think we're dead, and then give them a surprise."

"All right."

Long, long minutes. . . . If only they did not know that it was the customary thing for a dead man to fall. . . . Slowly they began to move in.

Then Garth and I were upon them. They halted as if stupefied. We had hacked our way half through their mass. The rest fled, and we began running toward the *Comet*, praying that we might reach the ship before they could get organized again. How we floundered through the sand in wild and desperate haste.

BEFORE we had covered half the distance, the pursuit began. There was no attempt to drag us down directly, but the two wings raced past to cut us off in front. At the base of the little cliff where the *Comet* lay, the circle closed.

"Jump," I called, and threw myself up over them toward the stone. Garth would have fallen back, but I caught his hand and pulled him to safety. We had won.

But had we? Joined by reinforcements from somewhere, the creatures were packed all around the base of the cliff and had begun to climb its walls, to cut us off from the ship. We rushed separately toward the two sides, and they backed away. But those in front were now established on the top. We stepped backward, and the whole line came on. But now we turned and ran for the *Comet*.

We were just able to turn again and clear them away with our swords. In a moment others would be climbing up from behind over the ship. And the door to safety was on a level with our heads.

There was just one chance. Stamping threateningly, we cleared the things out for ten feet in front of us. But once we turned our backs for a running start they were at us again.

"Boost you up, Dunal," said Garth pantingly.

"No, you first."

But in the midst of my words, he almost threw me into the doorway. I turned to pull him up after me. They were around his legs, and one had jumped down upon his helmet. And he must have known it would happen.

"Go back to her," he cried, and slammed shut the door.

THERE was no time to help him, to interfere with the way of expiation he had chosen. I tried to look away, but a sort of fascination kept me watching him through the glass. He had been dragged to his knees. Then he was

up again, whirling to keep them away on all sides in a mad, gallant fight. But the creatures knew it was the kill. Now they were around his knees, now up to his waist in their overpowering mass. It was only a matter of minutes.

Garth took a staggering step backward, dragging them all with him. He was facing me, and swung up his sword in the old Lunar salute. "Good luck, Dunal." The words, coming clearly over the radio, had a note of exaltation.

Then flashing his blade over his head, he hurled it into the midst of the accursed things. With a tremendous effort, Garth tore the protecting helmet from his head, and plunged backward over the cliff. . . .

There was nothing to do but get in out of the lock and start for home, and little on the trip is worthy of recounting. Without unsurpassable difficulty, I was able to operate the machinery and steer, first for Betelguese, then for the sun. Counting on the warning bells to arouse me, I managed to get in snatches of sleep at odd intervals. At times the strain of the long watches was almost maddening.

By the time the midpoint had been passed, I was living in a sort of waking dream; or rather, a state of somnambulism. I ate; my hands moved the controls. And yet all the while my mind was wandering elsewhere—out to Garth's body under the blazing light of Rigel, back to the moon and Kelvar, or else in an unreal, shadowy world of dreams and vague memories.

WITH perfect mechanical accuracy I entered the solar system and adjusted the projectors for the sun's attraction. Running slower and slower, I watched Venus glide by. And then, gradually, everything faded, and I was walking along the great Nardos bridge with Kelvar. The ocean was so still that we could see mirrored in it the reflection of each white column, and our own faces peering down, and beyond that the stars.

"I shall bring you a handful for your hair," I told her, and leaned over farther, farther, reaching out. . . . Then I was falling, with Kelvar's face growing fainter, and in my ears a horrible ringing like the world coming to an end.

Just before I could strike the water, I wakened to find the alarm bell jangling and the object-indicator light flashing away. Through the telescope, the moon was large in the sky.

It was an hour, perhaps two, before I approached the sunlit surface and hovered over the shore by Nardos. Try as I would, my sleep-drugged body could not handle the controls delicately enough to get the *Comet* quite in step with the moon's rotation. Always a little too fast or too slow. I slid down until I was only ten or fifteen feet off the ground that seemed to be moving out from under me. In another minute I should be above the water. I let everything go, and the *Comet* fell. There was a thud, a sound of scraping over the sand, a list to one side. I thought for an instant that the vessel was going to turn over, but with the weight of the reserve mercury in the fuel tanks it managed to right itself on a slope of ten or fifteen degrees.

From the angle, I could barely see out the windows, and everything looked strange. The water under the bridge seemed too low. The half-full Earth had greenish-black spots on it. And the sky?

SO dead with sleep that I could scarcely move, I managed to crane my neck around to see better. There was no sky, only a faint gray haze through which the stars shone. And yet the sun must be

shining. I stretched still further. There the sun burned, and around it was an unmistakable corona. It was like airless space.

Was I dreaming again?

With a jerk, I got to my feet and climbed up the sloping floor to the atmosphere tester. My fingers slipped off the stop-cock, then turned it. And the air-pressure needle scarcely moved. It was true. Somehow, as the scientists had always told us would be the case eventually, the air of the moon, with so little gravity to hold it back, had evaporated into space.

But in six months? It was unthinkable. Surely someone had survived the catastrophe. Some people must have been able to keep themselves alive in caves where the last of the atmosphere would linger. Kelvar *must* be still alive. I could find her and bring her to the *Comet*. We would go to some other world.

Frantically, I pulled on my spacesuit and clambered through the airlock. I ran, until the cumbersome suit slowed me down to a staggering walk through the sand beside the Oceanus Procellarum.

Leaden and dull, the great sea lay undisturbed by the thin atmosphere still remaining. It had shrunk by evaporation far away from its banks, and where the water once had been there was a dark incrustation of impurities. On the land side, all was a great white plain of glittering alkali without a sign of vegetation. I went on toward Nardos the Beautiful.

EVEN from afar off, I could see that it was desolate. Visible now that the water had gone down, the pillars supporting it rose gaunt and skeletal. Towers had fallen in, and the gleaming white was dimmed. It was a city of the dead, under an Earth leprous-looking with black spots where the clouds apparently had parted.

I came nearer to Nardos and the bridge, nearer to the spot where I had last seen Kelvar. Below the old water level, the columns showed a greenish stain, and half-way out the whole structure had fallen in a great gap. I reached the land terminus of the span, still glorious and almost beautiful in its ruins. Whole blocks of stone had fallen to the sand, and the adamantine pillars were cracked and crumbling with the erosion of ages.

Then I knew.

In our argument as to the possible speed of the *Comet*, Garth and I had both been right. In our reference frame, the vessel had put on an incredible velocity, and covered the nine-hundred-odd light-years around Rigel in six months. But from the viewpoint of the moon, it had been unable to attain a velocity greater than that of light. As the accelerating energy pressed the vessel's speed closer and closer toward that limiting velocity, the mass of the ship and of its contents had increased toward infinity. And trying to move laboriously with such vast mass, our clocks and bodies had been slowed down until to our leaden minds a year of moon time became equivalent to several hours.

The *Comet* had attained an average velocity of perhaps 175,000 miles per second, and the voyage that seemed to me six months had taken a thousand years. A thousand years! The words went ringing through my brain. Kelvar had been dead for a thousand years. I was alone in a world uninhabited for centuries.

I threw myself down and battered my head in the sand.

MORE to achieve, somehow, my own peace of mind, than in any hope of its being discovered, I have written this narrative. There are two copies, this to be placed in

a helio-beryllium box at the terminus of the bridge, the other within the comet. One at least should thus be able to escape the meteors which, unimpeded by the thin atmosphere, have begun to strike everywhere, tearing up great craters in the explosion that follows as a result of the impact.

My time is nearly up. Air is still plentiful on the *Comet*, but my provisions will soon run short. It is now slightly over a month since I collapsed on the sands into merciful sleep, and I possess food and water for perhaps another. But why go on in my terrible loneliness?

Sometimes I waken from a dream in which they are all so near—Kelvar, Garth, all my old companions—and for a moment I cannot realize how far away they are. Beyond years and years. And I, trampling back and forth over the dust of our old life, staring across the waste, waiting—for what?

No, I shall wait only until the dark. When the sun drops over the Grimaldi plateau, I shall put my manuscripts in their safe places, then tear off my helmet and join the other two.

An hour ago, the bottom edge of the sun touched the horizon.

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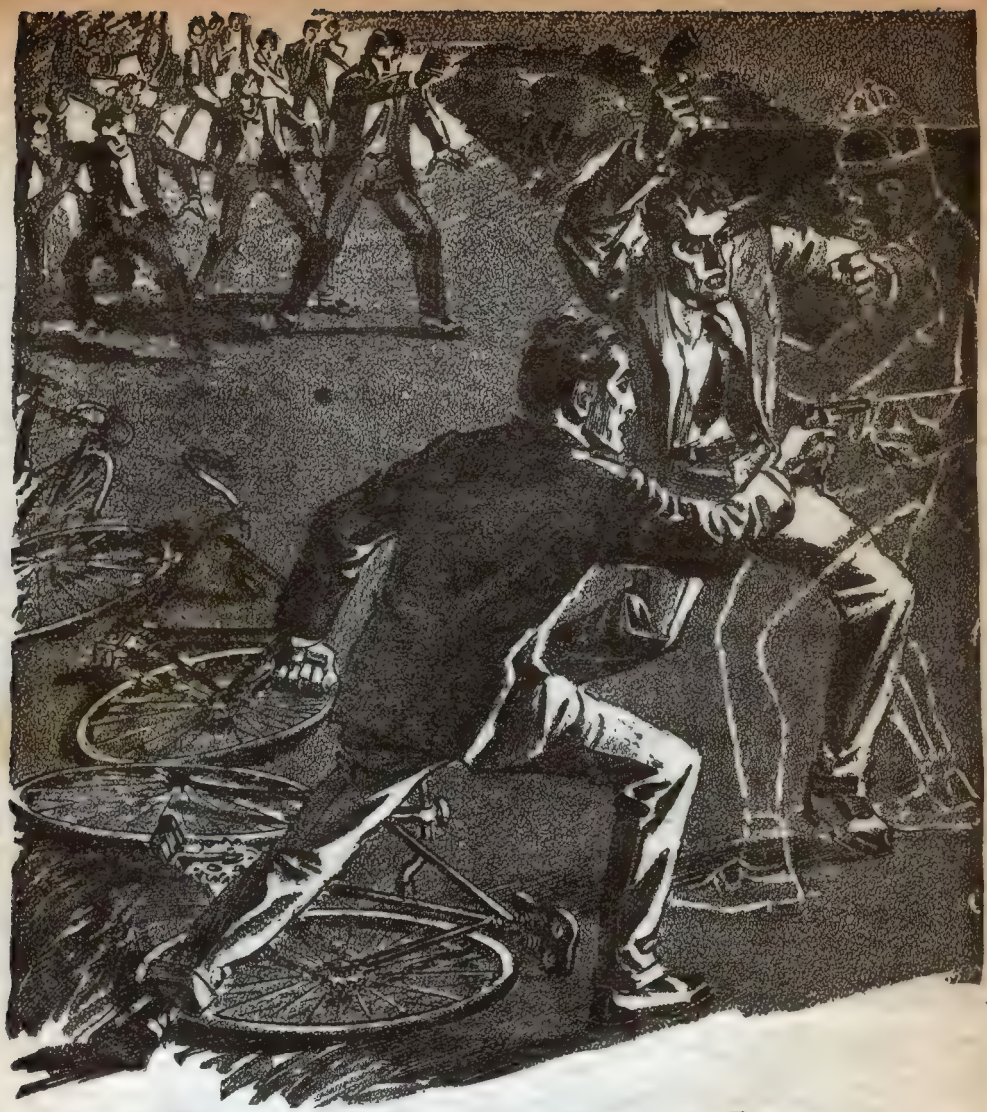
The Conclusion of the Outstanding Current Novel

By Capt. S. P. Meek

—And Others!



The White Invaders

A Complete Novelette

By Ray Cummings

CHAPTER I

A White Shape in the Moonlight

THE colored boy gazed at Don and me with a look of terror.

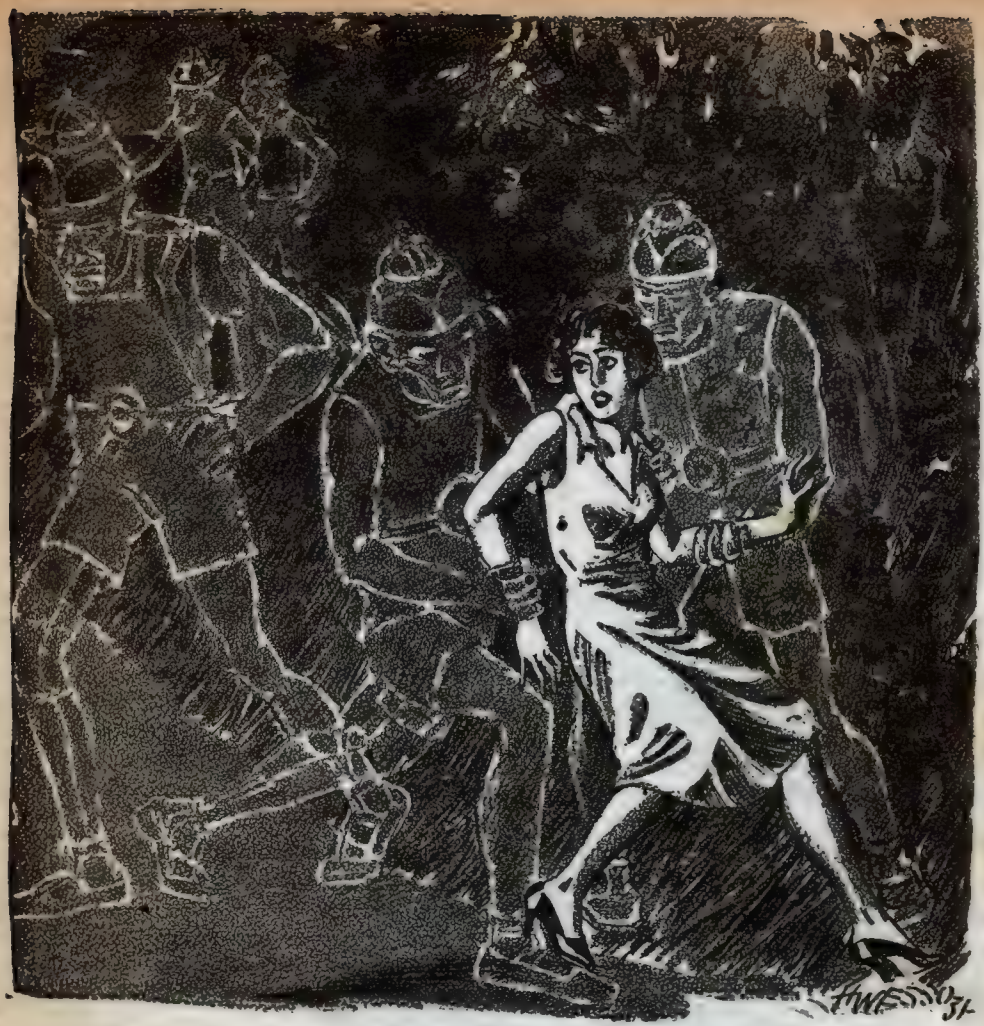
"But I tell you I seen it!" he insisted. "An' it's down there now. A ghost! It's all white an' shinin'!"

Out of their unknown fourth dimensional realm materializes a horde of White Invaders with power invincible.

"Nonsense, Willie," Don turned to me. "I say, Bob, what do you make of this?"

"I seen it, I tell you," the boy broke in. "It ain't a mile from here if you want to go look at it."

Don gripped the colored boy whose coffee complexion had taken on a greenish cast with his terror.



I fired at an oncoming white figure.

"Stop saying that, Willie. That's absolute rot. There's no such thing as a ghost."

"But I seen—"

"Where?"

"Over on the north shore. Not far."

"What did you see?" Don shook him. "Tell us exactly."

"A man! I seen a man. He was up on a cliff just by the golf course when I first seen him. I was comin' along the path down by the Fort Beach an' I looked up an' there he was, shinin' all white in the moonlight. An' then before I could run, he came floatin' down at me."

"Floating?"

"Yes. He didn't walk. He came down through the rocks. I could see the rocks of the cliff right through him."

Don laughed at that. But neither he nor I could set this down as utter nonsense, for within the past week there had been many wild stories of ghosts among the colored people of Bermuda. The Negroes of Bermuda are not unduly

superstitious, and certainly they are more intelligent, better educated than most of their race. But the little islands, this past week, were echoing with whispered tales of strange things seen at night. It had been mostly down at the lower end of the comparatively inaccessible Somerset; but now here it was in our own neighborhood.

"You've got the fever, Willie," Don laughed. "I say, who told you you saw a man walking through rock?"

"Nobody told me. I seen him. It ain't far if you—"

"You think he's still there?"

"Maybe so. Mr. Don, he was standin' still, with his arms folded. I ran, an'—"

"Let's go see if he's there," I suggested. "I'd like to have a look at one of these ghosts."

BUT even as I lightly said it, a queer thrill of fear shot through me. No one can contemplate an encounter with the supernatural without a shudder.

"Right you are," Don exclaimed. "What's the use of theory? Can you lead us to where you saw him, Willie?"

"Ye-es, of course."

The sixteen-year-old Willie was shaking again. "W-what's that for, Mr. Don?"

Don had picked up a shotgun which was standing in a corner of the room.

"Ain't no—no use of that, Mr. Don."

"We'll take it anyway, Willie. Ready, Bob?"

A step sounded behind us. "Where are you going?"

It was Jane Dorrance, Don's cousin. She stood in the doorway. Her long, filmy white summer dress fell nearly to her ankles. Her black hair was coiled on her head. In her bodice was a single red poinsettia blossom. As she stood motionless, her small slight figure framed againt the dark background of the hall, she could have been a painting of an English beauty save for the black hair suggesting the tropics. Her blue-eyed gaze went from Don to me, and then to the gun.

"Where are you going?"

"Willie saw a ghost." Don grinned. "They've come from Somerset, Jane. I say, one of them seems to be right here."

"Where?"

"Willie saw it down by the Fort Beach."

"To-night?"

"Yes. Just now. So he says, though it's all rot, of course."

"Oh," said Jane, and she became silent.

SHE appeared to be barring our way. It seemed to me, too, that the color had left her face, and I wondered vaguely why she was taking it so seriously. That was not like Jane: she was a level-headed girl, not at all the sort to be frightened by Negroes talking of ghosts.

She turned suddenly on Willie. The colored boy had been employed in the Dorrance household since childhood. Jane herself was only seventeen, and she had known Willie here in this same big white stone house, almost from infancy.

"Willie, what you saw, was it a —a man?"

"Yes," said the boy eagerly. "A man. A great big man. All white an' shinin'."

"A man with a hood? Or a helmet? Something like a queer-looking hat on his head, Willie?"

"Jane!" expostulated Don. "What do you mean?"

"I saw him—saw it," said Jane nervously.

"Good Lord!" I exclaimed. "You did? When? Why didn't you tell us?"

"I saw it last night." She smiled faintly. "I didn't want to add to these wild tales. I thought it was my imagination. I had been asleep —I fancy I was dreaming of ghosts anyway."

"You saw it—" Don prompted.

"Outside my bedroom window. Some time in the middle of the night. The moon was out and the —the man was all white and shining, just as Willie says."

"But your bedroom," I protested. "Good Lord, your bedroom is on the upper floor."

But Jane continued soberly, with a sudden queer hush to her voice, "It was standing in the air outside my window. I think it had been looking in. When I sat up—I think I had cried out, though none of you heard me evidently—when I sat up, it moved away; walked away. When I got to the window, there was nothing to see." She smiled again. "I decided it was all part of my dream. This morning—well, I was afraid to tell you because I knew you'd laugh at me. So many girls down in Somerset have been imagining things like that."

TO me, this was certainly a new light on the matter. I think that both Don and I, and certainly the police, had vaguely been of the opinion that some very human trickster was at the bottom of all this. Someone, criminal or otherwise, against whom our shotgun would be efficacious. But here was level-headed Jane telling us of a man standing in mid-air peering into her second-floor bedroom, and then walking away. No trickster could accomplish that.

"Ain't we goin'?" Willie demanded. "I seen it, but it'll be gone."

"Right enough," Don exclaimed grimly. "Come on, Willie."

He disregarded Jane as he walked to the door, but she clung to him.

"I'm coming," she said obstinately, and snatched a white lace scarf from the hall rack and flung it over her head like a mantilla. "Don, may I come?" she added coaxingly.

He gazed at me dubiously. "Why, I suppose so," he said finally. Then he grinned. "Certainly no harm is going to come to us from a ghost. Might frighten us to death, but that's about all a ghost can do, isn't it?"

We left the house. The only other member of the Dorrance household was Jane's father—the Hon. Arthur Dorrance, M.P. He had been in Hamilton all day, and had not yet returned. It was about nine o'clock of an evening in mid-May. The huge moon rode high in a fleecy sky, illumining the island with a light so bright one could almost read by it.

"We'll walk," said Don. "No use riding, Willie."

"No. It's shorter over the hill. It ain't far."

WE left our bicycles standing against the front veranda, and, with Willie and Don leading us, we plunged off along the little dirt road of the Dorrance estate. The poinsettia blooms were thick on both sides of us. A lily field, which a month before had been solid white with blossoms, still added its redolence to the perfumed night air. Through the branches of the squat cedar trees, in almost every direction there was water visible—deep purple this night, with a rippled sheen of silver upon it.

We reached the main road, a twisting white ribbon in the moonlight. We followed it for a little distance, around a corkscrew turn, across a tiny causeway where the moonlit water of an inlet lapped against the base of the road and the

sea-breeze fanned us. A carriage, heading into the nearby town of St. Georges, passed us with the thud of horses' hoofs pounding on the hard smooth stone of the road. Under its jaunty canopy an American man reclined with a girl on each side of him. He waved us a jovial greeting as they passed.

Then Willie turned us off the road. We climbed the ramp of an open grassy field, with a little cedar woods to one side, and up ahead, half a mile to the right, the dark crumbling ramparts of a little ancient fort which once was for the defense of the island.

Jane and I were together, with Willie and Don in advance of us, and Don carrying the shotgun.

"You really saw it, Jane?"

"Oh, I don't know. I thought I did. Then I thought that I didn't."

"Well, I hope we see it now. And if it's human—which it must be if there's anything to it at all—we'll march it back to St. Georges and lock it up."

She turned and smiled at me, but it was a queer smile, and I must admit my own feelings were queer.

"Don't you think you're talking nonsense, Bob?"

"Yes, I do," I admitted. "I guess maybe the whole thing is nonsense. But it's got the police quite worried. You knew that, didn't you?" All this wild talk—there must be some basis for it."

Don was saying, "Take the lower path, Willie. Take the same route you were taking when you saw it."

WE climbed down a steep declivity, shadowed by cedar trees, and reached the edge of a tiny, almost landlocked, lagoon. It was no more than a few hundred feet in diameter. The jagged, porous gray-black rocks rose like an upstanding crater rim to mark its ten-foot entrance to the sea. A little white house stood here with its back against the fifty-foot cliff. It was dark, its colored occupants probably already asleep. Two rowboats floated in the lagoon, moored near the shore. And on the narrow strip of stony beach, nets were spread to dry.

"This way, Mister Don. I was comin' along here, toward the Fort." Willie was again shaking with excitement. "Just past that bend."

"You keep behind me." Don led us now, with his gun half raised. "Don't talk when we get further along, and walk as quietly as you can."

The narrow path followed the bottom of the cliff. We presently had the open sea before us, with a line of reefs a few hundred yards out against which the lazy ground swell was breaking in a line of white. The moonlit water lapped gently at our feet. The cliff rose to our right, a mass of gray-black rock, pitted and broken, fantastically indented, unreal in the moonlight.

"I seen it—just about there," Willie whispered.

Before us, a little rock headland jutted out into the water. Don halted us, and we stood silent, gazing. I think that there is hardly any place more fantastic than a Bermuda shorefront in the moonlight. In these little eroded recesses, caves and grottoes one might expect to see crooked-legged gnomes, scampering to peer at the human intruder. Gnarled cedars, hanging precariously, might hide pixies and elves. A child's dream of fairyland, this reality of a Bermuda shorefront.

"There it is!"

WILLIE'S sibilant whisper dispelled my roaming fancy. We all turned to stare behind us

in the direction of Willie's unsteady finger. And we all saw it—the white shape of a man down near the winding path we had just traversed. A wild thrill of fear, excitement, revulsion—call it what you will—surged over me. The thing had been following us!

We stood frozen, transfixed. The shape was almost at the water level, a hundred feet or so away. It had stopped its advance; to all appearances it was a man standing there, calmly regarding us. Don and I swung around to face it, shoving Jane and Willie behind us.

Willie had started off in terror, but Jane gripped him.

"Quiet, Willie!"

"There it is! See it—"

"Of course we see it," Don whispered. "Don't talk. We'll wait; see what it does."

We stood a moment. The thing was motionless. It was in a patch of shadow, but, as though gleaming with moonlight, it seemed to shine. Its glow was silvery, with a greenish cast almost phosphorescent. Was it standing on the path? I could not tell. It was too far away; too much in shadow. But I plainly saw that it had the shape of a man. Wraith, or substance? That also, was not yet apparent.

Then suddenly it was moving! Coming toward us. But not floating, for I could see the legs moving, the arms swaying. With measured tread it was walking slowly toward us!

Don's shotgun went up. "Bob, we'll hold our ground. Is it—is he armed, can you see?"

"No! Can't tell."

Armed! What nonsense! How could this wraith, this apparition, do us physical injury!

"If—if he gets too close, Bob, by God, I'll shoot. But if he's human, I wouldn't want to kill him."

THE shape had stopped again. It was fifty feet from us now, and we could clearly see that it was a man, taller than normal. He stood now with folded arms—a man strangely garbed in what seemed a white, tight-fitting jacket and short trunks. On his head was a black skull cap surmounted by a helmet of strange design.

Don's voice suddenly echoed across the rocks.

"Who are you?"

The white figure gave no answer. It did not move.

"We see you. What do you want?" Don repeated.

Then it moved again. Partly toward us and partly sidewise, away from the sea. The swing of the legs was obvious. It was walking. But not upon the path, nor upon the solid surface of these Bermuda rocks! A surge of horror went through me at the realization. This was nothing human! It was walking on some other surface, invisible to us, but something solid beneath its own tread.

"Look!" Jane whispered. "It's walking—*into the cliff!*"

There was no doubt about it now. Within thirty feet of us, it was slowly walking up what must have been a steep ascent. Already it was ten feet or more above our level. And it was behind the rocks of the cliff! Shining in there as though the rocks themselves were transparent!

Or were my senses tricking me? I whispered, "Is it back of the rocks? Or is there a cave over there? An opening?"

"Let's go see." Don took a step forward; and called again:

"You—we see you. Stand still! Do you want me to fire at you?"

The figure turned and again stood regarding us with folded arms. Obviously not Don's voice, but his movement, had stopped it. We left the path and climbed about

ten feet up the broken cliff-side. The figure was at our level now, but it was within the rocks. We were close enough now to see other details: a man's white face, with heavy black brows, heavy features; a stalwart, giant figure, six and a half feet at the least. The white garment could have been of woven metal. I saw black, thread-like wires looped along the arms, over the shoulders, down the sides of the muscular naked legs. There seemed, at the waist, a dial-face, with wires running into it.

The details were so clear that they seemed substantial, real. Yet the figure was so devoid of color that it could have been a light-image projected here upon these rocks. And the contour of the cliff was plainly visible in front of it.

WE stood gazing at the thing, and it stared back at us.

"Can you hear us?" Don called.

Evidently it could not. Then a sardonic smile spread over the face of the apparition. The lips moved. It said something to us, but we heard no sound.

It was a wraith—this thing so visibly real! It was apparently close to us, yet there was a limitless, intervening void of the unknown.

It stood still with folded arms across the brawny chest, sardonically regarding us. The face was strangely featured, yet wholly of human cast. And, above all, its aspect was strangely evil. Its gaze suddenly turned on Jane with a look that made my heart leap into my throat and made me fling up my arms as though to protect her.

Then seemingly it had contemplated us enough; the folded arms swung down; it turned away from us, slowly stalking off.

"Stop!" Don called.

"See!" I whispered. "It's coming out in the open!"

The invisible surface upon which it walked led it out from the cliff. The figure was stalking away from us in mid-air, and it seemed to fade slowly in the moonlight.

"It's going!" I exclaimed. "Don, it's getting away!"

Impulsively I started scrambling over the rocks; unreasoningly, for who can chase and capture a ghost?

Don stopped me. "Wait!" His shotgun went to his shoulders. The white shape was now again about fifty feet away. The gun blazed into the moonlight. The buckshot tore through the stalking white figure; the moonlit shorefront echoed with the shot.

When the smoke cleared away, we saw the apparition still walking quietly forward. Up over the sea now, up and out into the moonlit night, growing smaller and dimmer in the distance, until presently it was faded and gone.

A ghost?

We thought so then.

CHAPTER II

The Face at the Window

THIS was our first encounter with the white invaders. It was too real to ignore or treat lightly. One may hear tales of a ghost, even the recounting by a most reliable eye-witness, and smile skeptically. But to see one yourself—as we had seen this thing in the moonlight of that Bermuda shorefront—that is a far different matter.

We told our adventure to Jane's father when he drove in from Hamilton about eleven o'clock that same evening. But he, who personally had seen no ghost, could only look perturbed that we should be so deluded. Some trickster—or some trick of the moonlight, and the shadowed rocks aiding our own sharpened imaginations. He could think of no other explanation. But

Don had fired pointblank into the thing and had not harmed it.

Arthur Dorrance, member of the Bermuda Parliament, was a gray-haired gentleman in his fifties, a typical British Colonial, the present head of this old Bermuda family. The tales or the ghosts, whatever their origin, already had forced themselves upon Governmental attention. All this evening, in Hamilton, Mr. Dorrance had been in conference trying to determine what to do about it. Tales of terror in little Bermuda had a bad enough local effect, but to have them spread abroad, to influence adversely the tourist trade upon which Bermuda's very existence depended—that presaged economic catastrophe.

"And the tales are spreading," he told us. "Look here, you young cubs, it's horribly disconcerting to have you of all people telling me a thing like this."

Even now he could not believe us. But he sat staring at us, eyeglasses in hand, with his untouched drink before him.

"We'll have to report it, of course. I've been all evening with the steamship officials. They're having cancellations." He smiled faintly at me. "We can't get along without you Americans, Bob."

I have not mentioned that I am an American. I was on vacation from my job as radio technician in New York. Don Livingston, who is English and three years my senior, was in a similar line of work—at this time he was technician in the small Bermuda broadcasting station located in the nearby town of St. Georges.

WE talked until nearly midnight. Then the telephone rang. It was the Police Chief in Hamilton. Ghosts had been seen in that vicinity this evening. There were a dozen complaints of ghostly marauders prowling around homes. This time from both white and colored families.

And there was one outstanding fact, frightening, indeed, though at first we could not believe that it meant very much, or that it had any connection with this weird affair. In the residential suburb of Paget, across the harbor from Hamilton, a young white girl, named Miss Arton, had vanished. Mr. Dorrance turned from the telephone after listening to the details and faced us with white face and trembling hands, his expression more perturbed and solemn than ever before.

"It means nothing, of course. It cannot mean anything."

"What, father?" Jane demanded. "Something about Eunice?"

"Yes. You know her, Bob—you played tennis down there with her last week. Eunice Arton."

I remembered her. A Bermuda girl; a beauty, second to none in the islands, save perhaps Jane herself. Jane and Don had known her for years.

"She's missing," Mr. Dorrance added. He flashed us a queer look and we stared at him blankly. "It means nothing, of course," he added. "She's been gone only an hour."

But we all knew that it did mean something. For myself I recall a chill of inward horror; a revulsion as though around me were pressing unknown things; unseeable, imponderable things menacing us all.

"Eunice missing! But father, how missing?"

He put his arm around Jane. "Don't look so frightened, my dear child."

He held her against him. If only all of us could have anticipated the events of the next few days. If only we could have held Jane, guarded her, as her father was affectionately holding her now!

DON exclaimed, "But the Chief of Police gave you details?"

"There weren't many to give." He lighted a cigarette and smiled at his trembling hands. "I don't know why I should feel this way, but I do. I suppose—well, it's what you have told me to-night. I don't understand it—I can't think it was all your imagination."

"But that girl, Eunice," I protested.

"Nothing—except she isn't at home where she should be. At eleven o'clock she told her parents she was going to retire. Presumably she went to her room. At eleven-thirty her mother passed her door. It was ajar and a bedroom light was lighted. Mrs. Arton opened the door to say good night to Eunice. But the girl was not there."

He stared at us. "That's all. There is so much hysteria in the air now, that Mr. Arton was frightened and called upon the police at once. The Artons have been telephoning to everyone they know. It isn't like Eunice to slip out at night—or is it, Jane?"

"No," said Jane soberly. "And she's gone? They didn't hear any sound from her?" A strange, frightened hush came upon Jane's voice. "She didn't—scream from her bedroom? Anything like that?"

"No, he said not. Jane, dear, you're thinking more horrible things. She'll be found in the morning, visiting some neighbor or something of the kind."

But she was not found. Bermuda is a small place. The islands are so narrow that the ocean on both sides is visible from almost everywhere. It is only some twelve miles from St. Georges to Hamilton, and another twelve miles puts one in remote Somerset. By noon of the next day it was obvious that Eunice Arton was quite definitely missing.

THIS next day was May 15th—the first of the real terror brought by the White Invaders. But we did not call them that yet; they were still the "ghosts." Bermuda was seething with terror. Every police station was deluged with reports of the ghostly apparitions. The white figures of men—in many instances, several figures together—had been seen during the night in every part of the islands. A little band of wraiths had marched down the deserted main street of Hamilton. It was nearly dawn. A few colored men, three or four roistering visitors, and two policemen had seen them. They had appeared down at the docks and had marched up the slope of the main street.

The stories of eye-witnesses to any strange event always are contradictory. Some said this band of ghostly men marched on the street level; others said they were below it, walking with only their heads above the road surface and gradually descending. In any event the frightened group of onlookers scattered and shouted until the whole little street was aroused. But by then the ghosts had vanished.

There were tales of prowlers around houses. Dogs barked in the night, frantic with excitement, and then shivered with terror, fearful of what they could sense but not see.

In Hamilton harbor, moored at its dock, was a liner ready to leave for New York. The deck watch saw ghosts walking apparently in mid-air over the moonlit bay, and claimed that he saw the white figure of a man pass through the solid hull-plates of the ship. At the Gibbs Hill Lighthouse other apparitions were seen; and the St. David Islanders saw a group of distant figures seemingly a hundred feet or more beneath the beach—a group, heedless of being

observed; busy with some activity; dragging some apparatus, it seemed. They pulled and tugged at it, moving it along with them until they were lost to sight, faded in the arriving dawn and blurred by the white line of breakers on the beach over them.

The tales differed materially in details. But nearly all mentioned the dark helmets of strange design, the white, tightly fitting garments, and many described the dark thread-like wires looped along the arms and legs, running up into the helmet, and back across the chest to converge at the belt where there was a clock-like dial-face.

THE ghostly visitors seemed not aggressive. But Eunice Arton was missing; and by noon of May 15th it was apparent that several other white girls had also vanished. All of them were under twenty, all of prominent Bermuda families, and all of exceptional beauty.

By this time the little government was in chaos. The newspapers, by government order, were suppressed. The cable station voluntarily refused to send press dispatches to the outside world. Don, Jane and I, through Mr. Dorrance's prominence, had all the reports; but to the public it was only known by whispered, garbled rumor. A panic was impending. The New York liner, that morning of May 15th, was booked beyond capacity. An English ship, anchored out in the open channel outside Hamilton harbor, received passengers up to its limit and sailed.

The shops of St. Georges and Hamilton did not open that morning of May 15th. People gathered in the streets—groups of whites and blacks—trying to learn what they could, and each adding his own real or fancied narrative to the chaos.

Although there had seemed so far no aggression from the ghosts—our own encounter with the apparition being typical of them all—shortly after noon of the 15th we learned of an event which changed the whole aspect of the affair; an event sinister beyond any which had gone before. It had occurred in one of the hotels near Hamilton the previous night and had been suppressed until now.

A young woman tourist, living alone in the hotel, had occupied a bedroom on the lower floor. The storm blinds and windows were open. During the night she had screamed. Guests in nearby rooms heard her cries, and they were also conscious of a turmoil in the woman's room. Her door was locked on the inside, and when the night clerk finally arrived with a passkey and they entered, they found the room disordered, a wicker chair and table overturned, and the young woman gone, presumably out of the window. She had been a woman of about twenty-five, a widow, exceptionally attractive.

STOLEN by the ghosts? We could think of nothing else. Was that what had happened to Eunice Arton? Did that explain the reported disappearances of the several other girls? Did this ghostly activity have some rational purpose—the stealing of young white women, all of them of unusual beauty? The conclusion was forced upon us, and with it the whole affair took on a complexion shudderingly sinister. It was not a mere panic of the people with which Bermuda now had to cope—not merely an unexplainable supernatural visitation, harmless enough, save that it was terrorizing. This was a menace. Something which had to be met with action.

It would be futile for me to at-

tempt detailing the events of that chaotic day. We had all ridden over to Hamilton and spent the day there, with the little town in a turmoil and events seething around us—a seemingly endless stream of reports of what had happened the night before. By daylight no apparitions were seen. But another night was coming. I recall with an inward sinking of heart I saw the afternoon sun lowering, the sky-blue waters of the bay deepening into purple and the chalk-white little stone houses taking on the gray cast of twilight. Another night was coming.

The government was making the best preparations it could. Every policeman of the island force was armed and ready to patrol through the night. The few soldiers of the garrisons at St. Georges and Hamilton were armed and ready. The police with bicycles were ready to ride all the roads. The half dozen garbage trucks—low-geared motor trucks—were given over to the soldiers for patrol use. The only other automobiles on the islands were those few permitted for the use of the physicians, and there were a few ambulance cars. All of these were turned over to the troops and the police for patrol.

IN the late afternoon an American newspaper hydroplane arrived from New York. It landed in the waters of Hamilton harbor and prepared to encircle the islands throughout the night. And the three or four steamship tenders and the little duty boat which supplied the government dockyards with daily provisions all had steam up, ready to patrol the island waters.

Yet it all seemed so futile against this unknown enemy. Ghosts? We could hardly think of them now as that. Throughout the chaotic day I recall so many wild things I had heard others say, and had myself thought. The dead come to life as living wraiths? A ghost could not materialize and kidnap a girl of flesh and blood. Or could it? Hysterical speculation! Or were these invaders from another planet?

Whatever their nature, they were enemies. That much we knew.

Night fell upon the crowded turmoil of the little city of Hamilton. The streets were thronged with excited, frightened people. The public park was jammed. The hotels and the restaurants were crowded. Groups of soldiers and police on bicycles with electric torches fastened to their handlebars were passing at intervals. Overhead the airplane, flying low, roared past every twenty minutes or so.

The night promised to be clear. The moon would rise, just beyond the full, a few hours after sunset. It was a warm and breathless night, with less wind than usual. Most of the people crowding the streets and the restaurants were in white linen—themselves suggesting the white and ghostly enemy.

MR. DORRANCE was occupied at the Government House. Jane, Don and I had supper in a restaurant on Queen Street. It was nearly eight o'clock and the crowd in the restaurant was thinning out. We were seated near the street entrance where large plate-glass windows displayed a variety of bakery products and confections. Jane had her back to the street, but Don and I were facing it. Crowds were constantly passing. It was near the end of our meal. I was gazing idly through one of the windows, watching the passing people when suddenly I became aware of a man standing out there gazing in at me. I think I have never had so

startling a realization. It was a man in white doeskin trousers and blue blazer jacket, with a jaunty linen cap on his head. An abnormally tall, muscular man. And his smooth-shaven, black-browed face with the reflection from the restaurant window lights upon it, reminded me of the apparition we had seen the night before!

"Don! Don't look up! Don't move! Jane, don't look around!" I whispered, almost frantically.

I must have gone white for Don and Jane gaped at me in astonishment.

"Don't do that!" I murmured. "Someone outside, watching us!" I tried to smile. "Hot night, isn't it? Did you get a check, Don?" I looked around vaguely for the waitress, but out of the tail of my eyes I could see the fellow out there still peering in and staring intently at us.

"What is it?" Don whispered.

"Man watching us! See him out there—the r i g h t - h a n d window! Jane, don't look around!"

"Good Lord!" murmured Don.

"Looks like him, doesn't it?"

"Good Lord! But I say—"

"What is it?" murmured Jane. "What is it?"

"Waitress!" I called. "Check, please. There's a man out there, Jane—we're crazy, but he does look like that ghost we saw on the Fort Beach."

If the fellow knew that we had spotted him he gave no sign. He was still apparently regarding the bakery display in the window, but watching us nevertheless. I was sure of that.

The waitress gave us our check. "Nine and six," Don smiled. "Thank you. But didn't you forget that last coffee?"

The colored girl added the extra sixpence, and left us.

"You think that's the same—I say, good Lord—"

DON was speechless. Jane had gone white. The fellow moved to the other window, and Jane had a swift look at him. We all recognized him, or thought we did. What necromancy was this? Had one of the apparitions materialized? Was that ghost we saw, this gigantic fellow in doeskins and blazer who looked like a tourist standing out there at the window? Were these ghosts merely human enemies after all?

The idea was at once terrifying, and yet reassuring. This was a man with whom we could cope with normal tactics. My hand went to the pocket of my blazer where I had a little revolver. Both Don and I were armed—permits for the carrying of concealed weapons had been issued to us this same day.

I murmured, "Jane! There are the Blakinsons over there. Go join them. We'll be back presently."

"What are you going to do?" Don demanded.

"Go out and tackle him—shall we? Have a talk. Find out who he is."

"No!" Jane protested.

"Why not? Don't you worry, Jane. Right here in the public street—and we're both armed. He's only a man."

But was he only a man?

"We'll have a go at it," said Don abruptly. He rose from his seat. "Come on, Jane, I'll take you to the Blakinsons."

"Hurry it up!" I said. "He's leaving! We'll lose him!"

The fellow seemed about to wander on along the street. Don brought Jane over to the Blakinsons' table which was at the back of the restaurant. We left our check with her and dashed for the street.

"Where is he? Do you see him?" Don demanded.

He had gone. But in a moment we saw him, his white cap tower-

ing above the crowd down by the drugstore at the corner.

"Come on, Don! There he is!"

We half ran through the crowd. We caught the fellow as he was diagonally crossing the street. We rushed up, one on each side of him, and seized him by the arms.

CHAPTER III

Tako, the Mysterious

THE fellow towered head and shoulders over Don, and almost that over me. He stared down at us, his jaw dropping with surprise. My heart was pounding; to me there was no doubt about it now; this heavy-featured handsome, but evil face was the face of the apparition at whom Don had fired as it hung in the air over the Fort Beach path. But this was a man. His arm, as I clutched it, was muscularly solid beneath the sleeve of his flannel jacket.

"I say," Don panted. "Just a minute."

With a sweep of his arms the stranger angrily flung off our hold.

"What do you want?"

I saw, within twenty feet of us, a policeman standing in the street intersection.

"I beg your pardon," Don stammered. We had had no time to plan anything. I put in:

"We thought you were a friend of ours. This night—so much excitement—let's get back to the curb."

We drew the man to the sidewalk as a physician's little automobile with two soldiers in it waded its way slowly through the crowd.

The man laughed. "It is an exciting night. I never have seen Bermuda like this before."

Swift impressions flooded me. The fellow surely must recognize us as we did him. He was pretending friendliness. I noticed that though he seemed not over forty, his close-clipped hair beneath the white linen cap was silver white. His face had a strange pallor, not the pallor of ill health, but seemingly a natural lack of color. And his voice, speaking good English, nevertheless marked him for a foreigner—though of what nation certainly I could not say.

"We're mistaken," said Don. "But you look like someone we know."

"Do I, indeed? That is interesting."

"Only you're taller," I said. "You're not a Bermudian, are you?"

His eyes, beneath the heavy black brows shot me a look. "No. I am a stranger; a visitor. My name—"

HE hesitated briefly; then he smiled with what seemed an amused irony. "My name is Tako. Robert Tako. I am living at the Hamiltonia Hotel. Does that satisfy you?"

I could think of nothing to say. Nor could Don. The fellow added, "Bermuda is like a little ship. I understand your inquisitiveness—one must know everyone else. And who are you?"

Don told him.

"Ah, yes," he smiled. "And so you are a native Bermudian?"

"Yes."

"And you," he said to me, "you are American?"

"From New York, yes."

"That is more interesting. Never have I known an American. You are familiar with New York City?"

"Of course. I was born there."

His contemplative gaze made me shiver. I wondered what Don was planning as an outcome to this. The fellow seemed wholly at ease now. He was lounging against the drug store window with us before him. My eyes were level with the negligee collar of his blue linen

shirt, and abruptly I was galvanized into alertness. Just above the soft collar where his movements had crushed it down I saw unmistakably the loop of a tiny black thread of wire projecting upward! Conclusive proof! This was one of the mysterious enemies! One of the apparitions which had thrown all Bermuda into a turmoil stood materialized here before us.

I think that Don had already seen the wire. The fellow was saying nonchalantly,

"And you, Mr. Livingston—are you also familiar with New York City?"

"Yes," said Don. He had gone pale and tight-lipped. I caught his warning glance to me. "Yes," he repeated. "I lived there several years."

"I would like to know you two better. Much better—but not tonight."

He moved as though to take his leave of us. Then he added to Don,

"That most beautiful young lady with you in the restaurant—did I not see you there? Is that your sister?"

Don made his decision. He said abruptly, "That's none of your business."

It took the fellow wholly by surprise. "But listen—"

"I've had enough of your insolence," Don shouted.

The man's hand made an instinctive movement toward his belt, but I seized his wrist. And I added my loud voice to Don's. "No, you don't!"

A GROUP of onlookers was at once collecting around us. The giant tried to cast me off, but I clung to him with all my strength. And suddenly we were struggling to keep the fellow from breaking away from us. He muttered a strange-sounding oath.

"Let me go! You fools!"

"Not such fools," Don shouted. "Officer! I say—officer!"

Don's revolver was in his hand; people were pressing around us, but when they saw the revolver they began scattering. The giant made a lunge and broke away from us, heedless that Don might have shot him.

"What's all this? I say, you three, what are you up to?"

The policeman came on a run. A group of soldiers passing on bicycles, flung the machines aside and came dashing at us. The giant stood suddenly docile.

"Officer, these young men attacked me."

"He's a liar!" Don shouted. "Watch him! He might be armed—don't let him get away from you!"

The law surrounded us. "Here's my weapon," said Don. "Bob, give up your revolver."

In the turmoil Don plucked the policeman aside.

"I'm nephew of the Honorable Arthur Dorrance. Take us to your chief. I made that uproar to catch that big fellow."

The name of the Honorable Arthur Dorrance was magic. The policeman stared at our giant captive who now was surrounded by the soldiers.

"But I say—"

"Take us all in and send for Mr. Dorrance. He's at the Government House."

"But I say—That big blighter—"

"We think he's one of the ghosts!" Don whispered.

"Oh, my Gawd!"

With the crowd following us we were hurried away to the police station nearby.

THE sergeant said, "The Chief will be here in a few minutes. And we've sent for Mr. Dorrance."

"Good enough, Brown." It chanced that Don knew this sergeant very well. "Did you search the fellow?"

"Yes. No weapon in his clothes."

I whispered, "I saw a wire under his collar."

"Sh! No use telling that now, Bob."

I realized it. These policemen were frightened enough at our captive. Don added, "Before my uncle and the Chief arrive, let me have a talk with that fellow, will you?"

They had locked him up; and in the excitement of our arrival at the station both Don and I had completely forgotten the wire we had seen at his collar. But we remembered it now, and the same thought occurred to both of us. We had locked up this mysterious enemy, but would the prison bars hold him?

"Good Lord!" Don exclaimed. "Bob, those wires—Sergeant, we shouldn't have left that fellow alone! Is he alone! Come on!"

With the frightened mystified sergeant leading us we dashed along the little white corridor to the windowless cell in which the giant was confined. At the cell-door a group of soldiers lounged in the corridor.

"Smooth talker, that fellow."

"Gor blime me, who is he?"

We arrived with a rush. "Is he in there?" Don shouted. "Open the door, you fellows! See here, you watch him—we've got to get his clothes off. He's got some mechanism—wires and things underneath his clothes!"

"Get out of the way!" ordered the sergeant. "I'll open it!"

There was silence from behind the door. The prisoner had been in the cell no more than a minute or two.

WE burst open the door. The cell was dimly illumined. The figure of the giant stood backed in its further corner. But at the sight of him we all stood transfixed with horror. His shoes, trousers, shirt, jacket and cap lay in a little pile at his feet. He stood revealed in the short tight-fitting silvery garments. The wires were looped about his arms and legs and he had pulled a mesh of them over his head in lieu of a helmet.

He stood regarding us sardonically. And in that instant while we were stricken with the shock of it, I saw that the figure was fading. It was a solid human form no longer! A silvery cast had come upon it. Another second passed; it was visibly growing tenuous, wraithlike! It was melting while we stared at it, until in that breathless instant I realized that the wall behind it was showing through.

A wraith! An apparition! The vision of a ghost standing there, leering at us!

The soldiers had retreated back into the corridor behind us. The sergeant gripped me, and his other hand, wavering with fright, clutched a revolver.

"But it's—it's going!"

Don gasped, "Too late! Sergeant, give me that gun!"

"Wait!" I shouted. "Don't shoot at it!"

The shimmering glowing white figure was slowly moving downward as though floating through the cell-floor. Its own invisible surface was evidently not here but lower down, and it was beginning to drop. I don't know what frenzied courage—if courage it could be called—was inspiring me. I was wholly confused, but nevertheless I struck Don and the sergeant aside and rushed at the thing.

IT was a sensation most horrible. From the waist up it was still above the floor of the cell. My wildly flailing arms went through the chest! But I felt nothing. It was not even like waving aside a mist. There was nothing. I saw my solid fist plunge through the

leering ghostly face. I fought wildly, with a panic upon me, against the glowing phosphorescent nothingness of the appariton. My feet were stamping on its chest and shoulders. Then, as it sank lower, only the grinning face was down there.

Panting, and with the cold sweat of horror upon me, I felt Don shoving me aside.

"Too late!"

And then the sergeant's shot rang out. The bullet clattered against the solid stone floor of the cell. The acrid smoke of the powder rolled over us; and cleared in a moment to show us the apparition several feet below the floor level. It seemed to strike its solidity of ground. I saw it fall the last little distance with a rush; land, and pick itself up. And with a last sardonic grin upward at us, the dim white figure ran. Dwindling smaller, dimmer, until in a moment it was gone into the Unknown.

As though a light had struck upon me came the realization.

"Don, this is rational, this thing! Some strange science!"

All day we had been vaguely realizing it. Intangible, but rational enemies were stealing white girls of Bermuda. Invaders from another planet? We had thought it might be that. Certainly it was nothing supernatural. These was not ghosts.

But now came a new realization. "Don! That's another world down there! Another realm! The fourth dimension—that's what it is! These things everybody's calling ghosts—it's the fourth dimension, Don! People of the fourth dimension coming out to attack us!"

And already the real menace had come! At that moment, half a mile away across the harbor on the slope of the little hill in Paget, an army of the White Invaders suddenly materialized, with dull, phosphorescent-green light-beams flashing around the countryside, melting trees and vegetation and people into nothingness!

The attack upon Bermuda had begun!

CHAPTER IV

Ambushed!

THE events which I have now to describe are world history, and have been written in many forms and by many observers. I must, however, sketch them in broadest outline for the continuity of this personal narrative of the parts played by my friends and myself in the dire and astounding affair which was soon to bring chaos, not only to little Bermuda but to the great United States as well, and a near panic everywhere in the world.

On this evening of May 15th, 1938, the White Invaders showed themselves for the first time as rational human enemies. The residential suburb of Paget lies across the little harbor from the city of Hamilton. It is a mile or so by road around the bay, and a few minutes across the water by ferry. The island in the Paget section is a mere strip of land less than half a mile wide in most places, with the sheltered waters of the harbor on one side, and the open Atlantic with a magnificent pink-white beach on the other. The two are divided by a razor-back ridge—a line of little hills a hundred feet or so high, with narrow white roads and white stone residences set on the hill-slopes amid spacious lawns and tropical gardens; and with several lavish hotels on the bay shore, and others over the ridge, fronting the beach.

The invaders landed on the top of the ridge. It seemed that, without warning, a group of white-clad men were in a cedar grove up there. They spread out, running

along the roads. They seemed carrying small hand-weapons from which phosphorescent-green light-beams flashed into the night.

The first reports were chaotic. A few survivors appeared in Hamilton who claimed to have been very close to the enemy. But for the most part the descriptions came from those who had fled when still a mile or more away. The news spread as though upon the wings of a gale. Within an hour the hotels were emptied; the houses all along the shore and the bayside hill-slope were deserted by their occupants. Boats over there brought the excited people into Hamilton until no more boats were available. Others came madly driving around the harbor road, on bicycles, and on foot—and still others escaped toward distant Somerset.

A THOUSAND people or more came in within that hour. But there were others who did not come—those who were living in the score or two of houses up on the ridge in the immediate neighborhood of where the invaders appeared. . . .

Don and I met Mr. Dorrance at the police station within a few minutes after the news of the Paget attack reached us. We hurried back to the restaurant and found Jane still there with the Blakinsons. Ten minutes later we were all in the Government House, receiving the most authentic reports available.

From the windows of the second floor room where Mr. Dorrance sat with a number of the officials, Don, Jane, and I could see across the harbor and to the ridge where the enemy was operating. It was not much over two miles from us. The huge, slightly flattened moon had risen. The bay and the distant little hills were flooded with its light. We could see, off on the ridge-top, the tiny flashing green beams. But there was no sound save the turmoil of the excited little city around us.

"They don't seem to be moving," Don murmured. "They're right where they were first reported."

It seemed as though the small group of light-beams, darting back and forth, nevertheless originated from one unshifting place. The beams, we realized, must be extremely intense to be visible even these two miles or so, for we could see that they were very small and of very short range—more like a hand-flashlight than anything else. How many of the enemy were there? They were men, we understood: solid, human men garbed in the fashion of the apparitions which had been so widely seen.

The patrolling airplane, connected with us here by wireless telephone, gave us further details. There seemed to be some fifty of the invaders. They stood in a group in what had been a small cedar grove. It was a barren field now; the trees had melted and vanished before the silent blasts of the green light-beams. They had, these beams, seemingly a range of under a hundred feet. The invaders had, at first, run with them along the nearby roads and attacked the nearest houses. Part of those houses were still standing, save for the wooden portion of them which had vanished into nothingness as the green light touched it. The people, too, were annihilated. The airplane pilot had seen a man running near the field trying to escape. The light touched him, clung to him for a moment. There was an instant as he fell that he seemed melting into a ghostly figure; and then he was gone.

FIFTY invaders. But they were human; they could be attacked. When they first appeared, the

nature of them still unrealized, a physician's automobile, manned by three soldiers, had been coming along the bay road at the foot of the ridge. The soldiers turned it into a cross road and mounted the hill. Two of them left it, scouting to see what was happening; the other stayed in the car. One of the enemy suddenly appeared. His ray struck the car. Its tires, its woodwork, and fabric and cushions melted and vanished, and the man within it likewise disappeared. Everything organic vanished under the assailing green beam. The other two soldiers fired at the attacker. He was human. He fell as their bullets struck him. Then others of his fellows came running. The two soldiers were driven away, but they escaped to tell of the encounter.

The airplane pilot, half an hour later, flew low and fired down into the group of enemy figures. He thought that one of them fell. He also thought he was out of range of their beams. But a pencil-point of the green light thinned and lengthened out. It darted up to his hundred-and-fifty-foot altitude and caught one of his wings. The plane fell disabled into the bay near the city docks, but the pilot swam safely ashore.

I need not detail the confusion and panic of the government officials who were gathered here in the room where Don, Jane and I stood watching and listening to the excitement of the incoming reports. For quiet little Bermuda the unprecedented situation was doubly frightening. An attack would have to be made upon the invaders. There were only fifty of the enemy; the soldiers and the police could in a few hours be mobilized to rush them and kill them all.

But could that be done? The thing had so many weird aspects, the invaders still seemed so much in the nature of the supernatural, that Mr. Dorrance advised caution. The enemy was now—this was about ten o'clock in the evening—quietly gathered in the little field on the ridge-top. They seemed, with their first attack over, no longer offensive. But, if assailed, who could say what they would do?

AND a thousand unprecedented things to do were pressing upon the harassed officials. Panic-stricken crowds now surged out of all control in the Hamilton streets. Refugees were coming in, homeless, needing care. The soldiers and the police were scattered throughout the islands, without orders of what to do to meet these new conditions.

And new, ever more frightening reports poured in. The telephone service, which links as a local call nearly every house throughout the islands, was flooded with frantic activity. From nearly every parish came reports of half-materialized ghosts. Fifty invaders? There were that many gathered on the Paget hill, but it seemed that there must be a thousand watching apparitions scattered throughout the islands. Harmless, merely frightening, wraiths. But if that little group in Paget were assailed, this other thousand might in a moment cease to be harmless "ghosts."

The astounded Bermuda officials were forced now to accept the realization that this was solid science. Incredible, fantastic, unbelievable—yet here it was upon us. Some unknown, invisible realm co-existed here in this same space. Its inhabitants had found a way to come out.

The government wireless, and the Canadian cables, could no longer withhold such news as this. Bermuda appealed now to Washington and to London for help. Warships would be coming shortly. Passenger liners on the high seas bringing holiday visitors, were turned aside.

The ships in the port of New York would not sail for Bermuda tomorrow.

I think that the outside world would have had jeering publics amused at little Bermuda hysterical over a fancied attack from the fabled fourth dimension. But by midnight this night, the United States at least was in no mood for jeering. A message came—reaching us soon after eleven o'clock, Bermuda time—by cable through Halifax from Washington. The thing already had passed beyond the scope of the Bermudas. White apparitions were seen on the Atlantic seaboard near Savannah. And then at Charleston; and throughout the night at several other points farther north. None materialized into solidity. But the "ghosts" were seen, appearing, vanishing, and reappearing always farther north.

It was a world menace!

AT about midnight Mr. Dorrance joined Jane, Don and me where we stood by the Government House windows watching the distant motionless group of enemy lights. He was pale and harassed.

"No use for you to stay here," he told us. "Don, you and Bob take Jane home. It's the safest place now."

The reports seemed to indicate that of all the parishes, St. Georges was now most free of the apparitions.

"Go home," he insisted. "You and Bob stay with Jane. Take care of her, lads." He smiled grimly. "We —all the government—may be moving to St. Georges by morning."

"But, father," Jane protested, "what will you do? Stay here?"

"For a while. I'll drive over by daybreak. I'll keep the Victoria. You have your cycles; you three ride over. Be careful, lads. You have your revolvers?"

"Yes," said Don.

We had no time for leave-taking. He was at once called away from us.

We left the Government House shortly after that, got our bicycles and started for the north shore road. Government Hill, where the road climbed through a deep cut in the solid rock, was thronged with carriages, and with cyclists walking up the hill. Most of the traffic was going in one direction—refugees leaving this proximity to the enemy.

We reached the top of the hill, mounted and began the long coast down. In an hour and a half or less we would be home. . . . Ah, if one could only lift the veil which hides even the immediate future, upon the brink of which we must always stand unseeing!

The north-shore road had the rocky seacoast upon our left—calm moonlit ocean across which in this direction lay the Carolinas some seven hundred miles away. We had gone perhaps three miles from Hamilton. The road was less crowded here. A group of apparitions had been seen in the neighborhood of the Aquarium, which was ahead of us, and most of the refugees were taking the middle road along Harrington Sound in the center of the island.

But we decided to continue straight on. It was shorter.

"And there will be more police along here," Don reasoned.

Heaven knows we did not feel in immediate danger. Cycling soldiers passed us at frequent intervals, giving us the news of what lay ahead. And we both had revolvers.

WE came presently to the bottom of one of the many steep little hills up which it is difficult to ride. We were walking up the grade, pushing our machines with Jane between us. A group of soldiers came coasting down the

hill, but when we were half-way up they had passed out of sight. It chanced at the moment that we were alone on the road. No house was near us. The ocean to our left lay at the bottom of a fifty-foot rocky cliff; to the right was a thick line of oleander trees, heavy with bloom.

Ahead of us, to the right within the line of oleanders, the glowing white figure of an apparition was visible. We stopped, out of breath from the climb, and stood by the roadside.

"See it there?" Don murmured. "Let's wait and watch it a moment."

One may get used to anything. We were not frightened. The figure, no more than twenty feet ahead of us, stood partly within a tree-trunk. It could not materialize there. It was the figure of a man, with helmet and looped wires.

"Not that fellow who called himself Tako," I whispered.

This one was smaller, no larger than Jane, perhaps. He raised his arms as though warning us to stop. We stood gazing at him, undecided whether to retreat or advance. An omnibus carriage coming from St. Georges stopped at the brow of the hill. Its occupants climbed out and began shouting at the apparition, at the same time flinging stones, one of which came bounding past us.

"Hi!" I called. "Stop that! No sense to that!"

SUDDENLY I heard a rustling of the oleanders at my side. We had no warning; our attention was wholly upon the apparition and the men by the carriage on the brow of the hill flinging stones. There was a rustling; the shadowed oleanders parted and figures leaped upon us!

I recall hearing Don shout, and Jane cry out. Our cycles clattered to the road. I fired at an oncoming white figure, but missed. The solid form of a man struck me and I went down, tangled in my wheel. There was an instant when I was conscious of fighting madly with a human antagonist. I was conscious of Don fighting, too. Jane stood, gripped by a man. Four or five of them had leaped upon us.

I had many instant impressions; then as I fought something struck my head and I faded into insensibility. I must have recovered within a moment. I was lying on the ground, partly upon a bicycle.

Don was lying near me. White figures of men with Jane in their midst were standing off the road, partly behind the bushes. They were holding her, and one of them was swiftly adjusting a network of wires upon her. Then, as I revived further, I heard shouts; people were arriving from down the hill. I tried to struggle to my feet, but fell back.

In the bushes the figures—and the figure of Jane—were turning silvery; fading into wraiths. They drifted down into the ground. They were gone.

CHAPTER V

Into the Enemy Camp

"BUT Bob, I won't go back to Government House," Don whispered. "Lord, we can't do that—get in for theories and questions and plans to gather a police squad. Every minute counts."

"What can we do?"

"Break away from these fellows—send Uncle Arthur a message—anything at all; and say we'll be back in half an hour. I tell you, Jane is gone—they've got her. You saw them take her. By now probably, they've got her off there in Paget among them. We've got to do something drastic, and do it now. If the police attacked—suppose Jane is in that Paget group—

the first thing they'd do when the police came at them would be to kill her. We can't go at it that way, I tell you."

We were trudging back up Government Hill with a group of soldiers around us. I had revived to find myself not seriously injured; a lump was on my head and a scalp wound where something had struck me. Don had regained consciousness a moment later and was wholly unharmed. His experience had been different from mine. Two men had seized him. He was aware of a sudden puff of an acrid gas in his face, and his senses had faded. But when they returned he had his full strength almost at once.

We realized what had happened. Half a dozen of the enemy were lying in ambush there on the roadside. It was young white girls they were after, and when we appeared with Jane, one of the invaders showed himself as an apparition to stop us, and then the others, fully materialized and hiding in the oleanders, had leaped upon us. They had had only time to escape with Jane, ignoring Don and me where we had fallen. They seemed also not aware of the nature of our weapons for they had not taken our revolvers.

HAD they gone now with Jane into the other realm of the Unknown? Or was she with them, over in Paget now in the little enemy camp there which was defying Bermuda? We thought very possibly it was the latter. The giant who had called himself Tako, who had escaped us in the Police Station, had been driven from our minds by all the excitement which followed. Was that Tako the leader of these invaders? Had he, for some time perhaps, been living as he said in the Hamiltonia Hotel? Scouting around Bermuda, selecting the young girls whom his cohorts were to abduct?

The thoughts made us shudder. He had noticed Jane. He it was, doubtless, who as an apparition had prowled outside Jane's room the night before last. And last night he had followed us to the Fort Beach. And again to-night in the restaurant he had been watching Jane. These men who had captured Jane now might very well carry her to Paget and hand her over to their leader, this giant Tako.

A frenzy of desperation was upon Don and me at the thought.

"But what shall we do?" I whispered.

"Get away from these soldiers, Bob. We've got our revolvers. We'll ride over there to Paget—just the two of us. It's our best chance that way. Creep up and see what's over there. And if Jane is there, we've got to get her, Bob—get her some way, somehow."

We could plan no further than that. But to return to Government House, to face Jane's father with the tale of what had happened, and then become involved in an official attempt to attack with open hostilities the enemy in Paget—that was unthinkable.

AT the foot of Government Hill, with a trumped-up excuse, Don got us away from our escort. The night was far darker now; a gray-white mass of clouds had come up to obscure the moon. We cycled through the outskirts of Hamilton to the harbor road and followed it around the marshy end of the bay and into Paget. There had been at first many vehicles coming in from the beach, but when we passed the intersection and nothing lay ahead of us but the Paget ridge we found the road deserted.

We had had our handle-bar flashlights turned on, but now we shut them off, riding slowly into the

darkness. Don presently dismounted.

"Better leave our wheels here."

"Yes."

We laid them on the ground in a little roadside banana patch. We were no more than a quarter of a mile from the enemy now; the glow of their green beams standing up into the air showed on the ridge-top ahead of us.

"We'll take the uproad," Don whispered. "Shall we? And when we get to the top, follow some path, instead of a road."

"All right," I agreed.

We started on foot up the steep side road which led from the bay shore to the summit of the ridge. The houses here were all dark and deserted, their occupants long since having fled to Hamilton. It was enemy country here now.

We reached the summit and plunged into a cedar grove which had a footpath through it. The green light-beams seemed very close; we could see them in a little group standing motionless up into the darkness of the sky.

"Can't plan," Don whispered. "But we must keep together. Get up as close as we can and see what conditions are."

And see if Jane were here. . . . It echoed through my head, and I knew it was also Don's guiding thought.

ANOTHER ten minutes. We were advancing with the utmost caution. The cedar grove was almost black. Then we came to the end of it. There was a winding road and two white houses a hundred feet or so apart. And beyond the houses was a stretch of open field, strangely denuded of vegetation.

"There they are, Bob!" Don sank to the ground with me beside him. We crouched, revolvers in hand, gazing at the strange scene. The field had been a cedar grove, but all the vegetation now was gone, leaving only the thin layer of soil and the outcropping patches of Bermuda's famous blue-gray rock. The houses, too, had been blasted. One was on this side of the field, quite near us. Its walls and roof had partially fallen; its windows and door rectangles yawned black and empty, with the hurricane shutters and the wooden window casements gone and the panes shattered into a litter of broken glass.

But the house held our attention only a moment. Across the two-hundred-foot field we could plainly see the invaders—forty or fifty men's figures dispersed in a little group. It seemed a sort of encampment. The green light beams seemed emanating from small hand projectors resting now on the ground. The sheen from them gave a dull lurid-green cast to the scene. The men were sitting about in small groups. And some were moving around, seemingly assembling larger apparatus. We saw a projector, a cylindrical affair, which half a dozen of them were dragging.

"Bob! Can you make out—back by the banana grove—captives? Look!"

THE encampment was at the further corner of the naked field. A little banana grove joined it. We could see where the enemy light had struck, partially melting off some of the trees so that now they stood leprous. In the grove were other figures of men, and it seemed that among them were some girls. Was Jane there among those captives?

"We've got to get closer," I whispered. "Don, that second house—if we could circle around and get there. From the corner of it, we'd be hidden."

"We'll try it."

The farther house was also in ruins It stood near the back edge

of the naked field and was within fifty feet of the banana grove. We circled back, and within ten minutes more were up against the broken front veranda of the house.

"No one here," Don whispered.

"No, evidently not."

"Let's try getting around the back and see them from the back corner."

We were close enough now to hear the voices in the banana grove. The half-wrecked house against which we crouched was a litter of stones and broken glass. It was black and silent inside.

"Don, look!"

Sidewise across the broken veranda the group of figures in the field were partly visible. We saw ghostly wraiths now among them—apparitions three or four feet above the ground. They solidified and dropped to earth, with their comrades gathering over them. The babble of voices in a strange tongue reached us. New arrivals materializing!

But was Jane here? And Tako, the giant? We had seen nothing of either of them. These men seemed all undersized rather than gigantic. We were about to start around the corner of the veranda for a closer view of the figures in the grove, when a sound near at hand froze us. A murmur of voices! Men within the house!

I PULLED Don flat to the ground against the stone steps of the porch. We heard voices; then footsteps. A little green glow of light appeared. We could see over the porch floor into the black yawning door rectangle. Two men were moving around in the lower front room, and the radiation from their green lights showed them plainly. They were small fellows in white, tight-fitting garments, with the black helmet and the looped wires.

"Don, when they come out—" I murmured it against his ear. "If we could strike them down without raising an alarm, and get those suits—"

"Quiet! They're coming!"

They extinguished their light. They came down the front steps, and as they reached the ground and turned aside Don and I rose up in the shadows and struck at them desperately with the handles of our revolvers. Don's man fell silently. Mine was able to ward off the blow; he whirled and flashed on his little light. But the beam missed me as I bent under it and seized him around the middle, reaching up with a hand for his mouth. Then Don came at us, and under his silent blow my antagonist wilted.

We had made only a slight noise; there seemed no alarm.

"Get them into the house," Don murmured. "Inside; someone may come any minute."

We dragged them into the dark and littered lower room. We still had our revolvers, and now I had the small hand-projector of the green light-beam. It was a strangely weightless little cylinder, with a firing mechanism which I had no idea how to operate.

In a moment we had stripped our unconscious captives of their white woven garments. In the darkness we were hopelessly ruining the mechanism of wires and dials. But we did not know how to operate the mechanism in any event; and our plan was only to garb ourselves like the enemy. Thus disguised, with the helmets on our heads, we could get closer, creep among them and perhaps find Jane. . . .

The woven garments which I had thought metal, stretched like rubber and were curiously light in weight. I got the impression now that the garments, these wires and disks, the helmet and the belt with

its dial-face—all this strange mechanism and even the green-ray projector weapon—all of it was organic substance. And this afterward proved to be the fact.*

We were soon disrobed and garbed in the white suits of our enemies. The jacket and trunks stretched like rubber to fit us.

"Can't hope to get the wires right," Don whispered. "Got your helmet?"

"Yes. The belt fastens behind, Don."

"I know. These accursed little disks, what are they?"

We did not know them for storage batteries as yet. They were thin flat circles of flexible material with a cut in them so that we could spring the edges apart and clasp them like bracelets at intervals on our arms and legs. The wires connected them, looped up to the helmet, and down to the broad belt where there was an indicator-dial in the middle of the front.**

WE worked swiftly and got the apparatus on somehow. The wires, broken and awry, would not be noticed in the darkness.

"Ready, Don?"

"Yes. I—I guess so."

"I've got this light cylinder, but we don't know how to work it."

"Carry it openly in your hand. It adds to the disguise." There was a note of triumph in Don's voice. "It's dark out there—only the green glow. We'll pass for them, Bob, at a little distance anyway. Come on."

We started out of the room. "You can hide your revolver in the belt—there seems to be a pouch."

"Yes."

We passed noiselessly to the veranda. Over our bare feet we were wearing a sort of woven buskin which fastened with wires to the ankle disks.

"Keep together," Don whispered. "Take it slowly, but walk openly—no hesitation."

My heart was pounding, seemingly in my throat, half-smothering me. "Around the back corner of the house," I whispered. "Then into the banana grove. Straighten."

"Yes. But not right among them. A little off to one side, passing by as though we were on some errand."

"If they spot us?"

"Open fire. Cut and run for it. All we can do, Bob."

Side by side we walked slowly along the edge of the house. At the back corner, the small banana grove opened before us. Twenty feet away, under the spreading green leaves of the trees a dozen or so men were working over apparatus. And in their center a

* As we later learned, the scientific mechanism by which the transition was made from the realm of the fourth dimension to our own earthly world and back again, was only effective to transport organic substances. The green light-beam was of similar limitation. An organic substance of our world upon which it struck was changed in vibration rate and space-time co-ordinates to coincide with the characteristics with which the light-current was endowed. Thus the invaders used their beams as a weapon. The light flung whatever it touched of organic material with horrible speed of transition away into the Unknown—to the fourth, fifth, or perhaps still other realms. In effect—annihilation.

The mechanism of wires and dials (and small disks which were storage batteries of the strange current) was of slower, more controllable operation. Thus it could be used for transportation—for space-time traveling, as Earth scientists later came to call it. The invaders, wearing this mechanism, materialized at will into the state of matter existing in our world—and by a reversal of the co-ordinates of the current, dematerialized into the more tenuous state of their own realm.

** We were soon to learn also that they were bringing into our world weapons, food, clothing and a variety of equipment by encasing the articles in containers operated by these same mechanisms of wires carrying the transition current. The transportation was possible because all the articles they brought with them were of organic substance.

group of captive girls sat huddled on the ground. Men were passing back and forth. At the edge of the trees, by the naked field, men seemed preparing to serve a meal. There was a bustle of activity everywhere; a babble of strange, subdued voices.

WE were well under the trees now. Don, choosing our route, was leading us to pass within ten or fifteen feet of where the girls were sitting. It was dark here in the grove; the litter of rotted leaves on the soft ground scrunched and swished under our tread.

There was light over by the girls. I stared at their huddled forms; their white, terrified faces. Girls of Bermuda, all of them young, all exceptionally pretty. I thought I recognized Eunice Arton. But still it seemed that Jane was not here. . . . And I saw men seated watchfully near them—men with cylinder weapons in their hands.

Don occasionally would stoop, poking at the ground as though looking for something. He was heading us in a wide curve through the grove so that we were skirting the seated figures. We had already been seen, of course, but as yet no one heeded us. But every moment we expected the alarm to come. My revolver was in the pouch of my belt where I could quickly jerk it out. I brandished the useless light cylinder ostentatiously.

"Don!" I gripped him. We stopped under a banana tree, half hidden in its drooping leaves. "Don—more of them coming!"

Out in the empty field, apparitions of men were materializing. Then we heard a tread near us, and stiffened. I thought that we were discovered. A man passed close to us, heading in toward the girls. He saw us; he raised a hand palm outward with a gesture of greeting and we answered it.

FOR another two or three minutes we stood there, peering, searching for some sign of Jane. . . . Men were distributing food to the girls now.

And then we saw Jane! She was seated alone with her back against a banana tree, a little apart from the others. And near her was a seated man's figure, guarding her.

"Don! There she is! We can get near her! Keep on the way we were going. We must go in a wide curve to come up behind her."

We started forward again. We were both wildly excited; Jane was at the edge of the lighted area. We could come up behind her; shoot her guard; seize her and dash off. . . . I saw that the mesh of wires, disks and a helmet were on Jane. . . .

Don suddenly stumbled over something on the ground. A man who had been lying there, asleep perhaps, rose up. We went sidewise, and passed him.

But his voice followed us. Unintelligible, angry words.

"Keep on!" I murmured. "Don't turn!"

It was a tense moment. The loud words brought attention to us. Then there came what seemed a question from someone over by the girls. We could not answer it. Then two or three other men shouted at us.

Don stopped, undecided.

"No!" I whispered. "Go ahead! Faster Don! It's darker ahead."

We started again. It seemed that all the camp was looking our way. Voices were shouting. Someone called a jibe and there was a burst of laughter. And from behind us came a man's voice, vaguely familiar, with a sharp imperative command.

Should we run? Could we escape now, or would a darting green beam strike us? And we were losing our chance for Jane.

Desperation was on me. "Faster, Don!"

The voice behind us grew more imperative. Then from nearby, two men came running at us. An uproar was beginning. We were discovered!

DON'S revolver was out. It seemed suddenly that men were all around us. From behind a tree-trunk squarely ahead a figure appeared with leveled cylinder. The ground leaves were swishing behind us with swiftly advancing footsteps.

"Easy, Bob!"

Don found his wits. If he had not at that moment we would doubtless have been annihilated in another few seconds. "Bob, we're caught—don't shoot!"

I had flung away the cylinder and drawn my revolver; but Don shoved down my extended hand and held up his own hand.

"We're caught!" He shouted aloud. "Don't kill us! Don't kill us!"

It seemed that everywhere we looked was a leveled cylinder. I half turned at the running footsteps behind us. A man's voice called in English.

"Throw down your weapons! Down!"

Don cast his revolver away, and mine followed. I was aware that Jane had recognized Don's voice, and that she was on her feet staring in our direction with horrified eyes.

The man from behind pounced upon us. It was the giant, Tako.

"Well, my friends of the restaurant! The American who knows New York City so well! And the Bermudian! This is very much to my liking. You thought your jail would imprison me, did you not?"

He stood regarding us with his sardonic smile, while our captors surrounded us, searching our belts for other weapons. And he added,

"I was garbed like you when we last met. Now you are garbed like me. How is that?"

THEY led us into the lighted area of the grove. "The American who knows New York City so well," Tako added. "And the Bermudian says he knows it also. It is what you would call an affair of luck, having you here."

He seemed highly pleased. He gazed at us smilingly. We stood silent while the men roughly stripped the broken wires and disks from us. They recognized the equipment. There was a jargon of argument in their strange guttural language. Then at Tako's command three of them started for the house.

Jane had cried out at sight of us. Her captor had ordered her back to her seat by the tree.

"So?" Tako commented. "You think silence is best? You are wise. I am glad you did not make us kill you just now. I am going to New York and you shall go with me; what you know of the city may be of help. We are through with Bermuda. There are not many girls here. But in the great United States I understand there are very many. You shall help us capture them."

Don began, "The girl over there—"

"Your sister? Your wife? Perhaps she knows something of New York and its girls also. We will keep her close with us. If you three choose to help me, you need have no fear of harm." He waved aside the men with imperious commands. "Come, we will join this girl of yours. She is very pretty, is she not? And like you—not cowardly. I have not been able to make her talk at all."

The dawn of this momentous night was at hand when, with the networks of wires and disks prop-

erly adjusted upon us, Tako took Jane, Don and me with him into the Fourth Dimension.

Strange transition! Strange and diabolical plot which now was unfolded to us! Strangely fantastic, weird journey from this Bermuda hilltop through the Unknown to the city of New York!

CHAPTER VI

The Attack upon New York

I MUST sketch now the main events following this night of May 15th and 16th as the outside world saw them. The frantic reports from Bermuda were forced into credibility by the appearance of apparitions at many points along the Atlantic seaboard of the southern States. They were sporadic appearances that night. No attacks were reported. But in all, at least a thousand wraithlike figures of men must have been seen. The visitations began at midnight and ended with dawn. To anyone, reading in the morning papers or hearing from the newscasters that "ghosts" were seen at Savannah, the thing had no significance. But in Washington, where officials took a summary of all the reports and attempted an analysis of them, one fact seemed clear. The wraiths were traveling northward. It could almost be fancied that this was an army, traveling in the borderland of the Unknown. Appearing momentarily as though coming out to scout around and see the contour and the characteristics of our realm; disappearing again into invisibility, to show themselves in an hour or so many miles farther north.

The reports indicated also that it was not one group of the enemy, but several—and all of them traveling northward. The most northerly group of them by dawn showed itself up near Cape Hatteras.

The news, when it was fully disseminated that next day, brought a mingling of derision and terror from the public. The world rang with the affair. Remote nations, feeling safe since nothing of the kind seemed menacing them, were amused that distant America, supposedly so scientifically modern, should be yielding to superstition worthy only of the Middle Ages. The accounts from Bermuda were more difficult to explain. And England, with Bermuda involved, was not skeptical; as a matter of fact, the British authorities were astonished. Warships were starting for Bermuda; and that morning of May 16th, with the passenger lines in New York not sailing for Bermuda, American warships were ordered to Hamilton. The menace, whatever it was, would soon be ended.

THAT was May 16th. Another night passed, and on May 17th the world rang with startled horror and a growing terror. Panics were beginning in all the towns and cities of the American seaboard north of Cape Hatteras. It was no longer a matter of merely seeing "ghosts." There had been real attacks the previous night.

There had been a variety of incidents, extraordinarily horrifying —so diverse, so unexpected that they could not have been guarded against. It was a dark night, an area of low pressure with leaden storm-clouds over all the Atlantic coastal region, from Charleston north to the Virginia Capes. A coastal passenger ship off Hatteras sent out a frantic radio distress call. The apparitions of men had suddenly been seen in mid-air directly in the ship's course. The message was incoherent; the vessel's wireless operator was locked in his room at the transmitter, wildly describing an attack upon the ships.

The white apparitions—a group of twenty or thirty men—had been marching in mid-air when the ship sighted them directly over its bow. In the darkness of the night they were only a hundred feet ahead when the lookout saw them. In a moment the vessel was under them, and they began materializing. . . . The account grew increasingly incoherent. The figures materialized and fell to the deck, picked themselves up and began running about the ship, attacking with little green light-beams. The ship's passengers and crew vanished, obliterated; annihilated. It seemed that young women among the passengers were being spared. The ship was melting—the wooden decks, all the wooden super-structure melting. . . . A few moments of fantastic horror, then the distress call died into silence as doubtless the green light-beams struck the operator's little cabin.

THAT vessel was found the next day, grounded on the shoals off Hatteras. The sea was oily and calm. It lay like a gruesome shell, as though some fire had swept all its interior. Yet not fire either, for there were no embers, no ashes. Diseased, leprous, gruesomely weird with parts of its interior intact and other parts obliterated. And no living soul was upon it save one steward crouching in a lower cabin laughing with madness which the shock of what he had seen brought upon him.

On land, a railroad train in Virginia had been wrecked, struck apparently by a greenish ray. And also in Virginia, during the early evening in a village, an outdoor festival at which there were many young girls was attacked by apparitions suddenly coming into solidity. The report said that thirty or more young girls were missing. The little town was in chaos.

And the chaos, that next day, spread everywhere. It was obvious now that the enemy was advancing northward. In Washington, Baltimore, Philadelphia, panics were begining. New York City was seething with excitement. People were leaving all the towns and cities of the area. An exodus north and westward. In New York, every steamship, airplane and railroad train was crowded with departing people. The roads to Canada and to the west were thronged with outgoing automobiles.

But it was only a small part of the millions who remained. And the transportation systems were at once thrown into turmoil, with the sudden frantic demands threatening to break them down. And then a new menace came to New York. Incoming food supplies for its millions crowded into that teeming area around Manhattan, were jeopardized. The army of men engaged in all the myriad activities by which the great city sustained itself were as terrified as anyone else. They began deserting their posts. And local communication systems went awry. The telephones, the lights, local transportation—all of them began limping, threatening to break.

TREMENDOUS, intricate human machine by whose constant activity so many millions are enabled to live so close together! No one could realize how vastly interwoven are a million activities which make life in a great city comfortable and safe until something goes wrong! And one wrong thing so swiftly affects another! As though in a vastly intricate mechanism little cogs were breaking, and the breaks spreading until presently the giant fly-wheels could no longer turn.

If the startled Federal and State officials could have foreseen even the events of the next forty-eight

hours they would have wanted New York City deserted of the population. But that was impossible. Even if everyone could have been frightened into leaving, the chaos of itself would have brought death to untold thousands.

As it was, May 17th and 18th showed New York in a growing chaos. Officials now were wildly trying to stem the panics, trying to keep organized the great machines of city life.

It is no part of my plan for this narrative to try and detail the events in New York City as the apparitions advanced upon it. The crowded bridges and tunnels; the traffic and transportation accidents; the failure of the lights and telephones and broadcasting systems; the impending food shortage; the breaking out of disease from a score of causes; the crushed bodies lying in the streets where frantic mobs had trampled them and no one was available to take them away. The scenes beggar description.

AND in all this the enemy had played no part save that of causing terror. Warships gathered in New York harbor were impotent. State troops massed in New Jersey, across the Hudson from New York, and in Putnam and Westchester Counties, were powerless to do more than try and help the escaping people since there was no enemy of tangible substance to attack. Patrolling airplanes, armed with bombs, were helpless. The white apparitions were gathering everywhere in the neighborhood of New York City. But they remained only apparitions, imponderable wraiths, non-existent save that they could be dimly seen. And even had they materialized, no warships could shell the city, for millions of desperate people were still within it trying to get away.

The news from little Bermuda was submerged, unheeded, in this greater catastrophe. But on the night of May 17th when the American warships arrived off Hamilton, the Paget invaders were gone.

The menace in Bermuda was over; it was the great New York City which was menaced now. The apparitions which had advanced from the south were suddenly joined by a much more numerous army. On the night of May 19th it had reached New York. Two or three thousand glowing white shapes were apparent, with yet other thousands perhaps hovering just beyond visibility. They made no attack. They stood encamped on the borderland of the Unknown realm to which they belonged. Busy with their preparations for battle and watching the stricken city to which already mere terror had brought the horror of disease and death.

It seemed now that this Fourth Dimension terrain co-existing within in the space of New York City, must be a tumbled, mountainous region of crags and spires, and yawning pits, ravines and valley depths. Jagged and precipitous indeed, for there were apparitions encamped in the air above Manhattan and harbor—higher in altitude than the Chrysler or the Empire State towers. Other wraiths showed in a dozen places lower down—some within the city buildings themselves. And yet others were below ground, within the river waters, or grouped seemingly a hundred feet beneath the street levels.

Fantastic army of wraiths! In the daylight they almost faded, but at night they glowed clearly. Busy assembling their weapons of war. Vanishing and reappearing at different points. Climbing or descending the steep cliffs and crags of their terrain to new points of

vantage; and every hour with their numbers augmenting. And all so silent! So grimly purposeful, and yet so ghastly silent!

It was near midnight of May 19th when the wraiths began materializing and the attack upon New York City began!

CHAPTER VII

The Invisible World

TAKO showed us how to operate the transition mechanism. The little banana grove on the Bermuda hilltop began fading. There was a momentary shock; a reeling of my head; a sudden sense of vibration within me. And then a feeling of lightness, weightlessness; and freedom, as though all my earthly life I had been shackled, but now was free.

The thing was at first terrifying, gruesome; but in a moment those feelings passed and the weightless freedom brought an exuberance of spirit.

Don and I were sitting with Jane between us, and the figure of Tako fronting us. I recall that we clung together, terrified. I closed my eyes when the first shock came, but opened them again to find my head steadying. Surprising vista! I had vaguely fancied that Tako, Jane and Don would be sitting here dissolving into apparitions. But my hands on Jane's arm felt it as solid as before. I stared into her face. It was frightened, white and set, but smiling at me.

"You all right, Bob? It's not so difficult, is it?"

She had endured this before. She reached out her hands, one to Don and one to me.

"We're dropping. I don't think it's far down, but be careful. Straighten your legs under you."

We seemed unchanged; Don and Jane were the same in aspect as before, save the color of their garments seemed to have faded to a gray. It was the Bermuda hilltop which to our vision was changing. The grove was melting, turning from green and brown to a shimmering silver. We now looked upon ghostly, shadowy trees; fading outlines of the nearby house; the nearby figures of Tako's men and the group of captive girls—all shadowy apparitions. The voices were fading; a silence was falling upon us with only the hum of the mechanism sounding in my ears.

I FELT with a shock of surprise that I was no longer seated on the ground. I seemed, for an instant floating, suspended as though perhaps immersed in water. The sweep of the ground level was a vague shadowy line of gray, but my legs had dropped beneath it. I was drifting down, sinking, with only Jane's hand to steady me.

"Thrust your feet down," she murmured. "A little fall. We want to land on our feet."

The imponderable ground of the banana grove was rising. We dropped, as though we were sinking in water. But we gathered speed; we felt a weight coming to our bodies. At last we fell; my feet struck a solid surface with a solid impact. Don and I lost our balance, but Jane steadied us. We were standing upon a dark rock slope, steeply inclined.

"Off with the current!" came Tako's voice. "The belt switch—throw it back!"

I found the little lever. The current went off. There had been a moment when the spectral shadows of my own world showed in the air above me. But we passed their visible limits and they faded out of sight.

We were in the realm of the Fourth Dimension. Outdoors, in a region of glowing, phosphorescent night. . . .

"THIS way," said Tako. "It is not far. We will walk. Just a moment, you three. I would not have you escape me."

Our revolvers were gone. Being metal, they could not, of actuality, be carried into the transition. We had no light-beam cylinders, nor did we as yet know how to use them. Tako stood before us; he reached to the operating mechanisms under the dial-face at our belts, making some disconnections which we did not understand.

His smile in the semi-darkness showed with its familiar irony. "You might have the urge to try some escaping transition. It would lose you in the Unknown. That would be death! I do not want that."

I protested, "We are not fools. I told you if you would spare us, return us safely to Bermuda when this is over—"

"That you might be of help to me," he finished. "Well, perhaps you will. I hope so. You will do what you can to help, willingly or otherwise; that I know." His voice was grimly menacing. And he laughed sardonically. "You are no fools, as you say. And Jane—" His glance went to her. "Perhaps, before we are through with this, you may even like me, Jane."

Whatever was in his mind, it seemed to amuse him.

"Perhaps," said Jane.

We three had had only a moment to talk together. There had been no possibility of escape. It was obvious to us that Tako was the leader of these invaders; and, whatever they were planning, our best chance to frustrate it was to appear docile. Safety for us—the possibility of later escaping—all of that seemed to lie in a course of docility. We would pretend friendliness; willingness to help.

Tako was not deceived. We knew that. Don, in those two or three hours we were with Tako before starting upon the transition, had said:

"But suppose we do help you in your scheme, whatever it is? There might be some reward for us, eh? If you plan a conquest, riches perhaps—"

Tako had laughed with genuine amusement. "So? You bargain? We are to be real friends—fellow conquerors? And you expect me to believe that?"

YET now he seemed half to like us. And there was Jane's safety for which we were scheming. Tako had been interested in Jane. We knew that. Yet she was at first little more to him than one of the girl captives. He might have left her with those others. But she was with us now, to stay with us upon this journey, and it was far preferable.

"This way," said Tako. "We will walk. It is not far to my encampment where they are preparing for the trip."

It seemed that a vast open country was around us. A rocky, almost barren waste; a mountainous region of steep gray defiles, gorges and broken tumbled ravines. A void of darkness hung overhead. There were no stars, no moon, no light from above. Yet I seemed presently to see a great distance through the glowing deep twilight. The glow was inherent to the rocks themselves; and to the spare, stunted, gray-blue vegetation. It was a queerly penetrating, diffused, yet vague light everywhere. One could see a considerable distance by it. Dim colors were apparent.

We trod the rocks with a feeling of almost normal body weight. The air was softly warm like a night in the tropics, with a faint breeze against our faces. It seemed a trackless waste here. We mounted an ascending ramp, topped a

rise with an undulating plateau ahead of us.

Tako stood a moment for us to get our breath. The air seemed rarefied; we were panting, with our cheeks tingling.

"My abode is there." He gestured to the distant lowland region behind us. We were standing upon a gray hilltop. The ground went down a tumbled broken area to what seemed a lowland plain. Ten miles away—it may have been that, or twice that—I saw the dim outline of a great castle or a fortress. A building of gigantic size, it seemed strangely fashioned with round-shaped domes heaped in a circle around a tower looming in the center. A wall, or a hedge of giant trees, I could not tell, but it seemed as gigantic as the wall of China, and was strung over the landscape in an irregular circle to enclose an area of several square miles, with the castle-fortress in its center. A little city was there, nestled around the fortress—a hundred or two small brown and gray mounds to mark the dwellings. It suggested a little feudal town of the Middle Ages of our own Earth, set here in this trackless waste.

AND I saw, down on the plain, a shining ribbon of river with thick vegetation along its banks. And within the enclosing wall there was the silvery sheen of a lake near the town; patches of trees, and brownish oval areas which seemed to be fields under cultivation.

"My domain," Tako repeated. There was a touch of pride in his voice. "I rule it. You shall see it —when we are finished with New York."

Again his gaze went to Jane, curiously contemplative. We started walking over the upper plateau level, seemingly with nothing in advance of us save empty luminous darkness. A walk of an hour. Perhaps it was that long. Time here had faded with our Earthly world. It was difficult to gauge the passing minutes—as difficult as to guess at the miles of this luminous distance.

As though the sight of his fortress—his tiny principality, whose inhabitants he ruled with absolute sway—had awakened in Tako new emotions, he put Jane beside him and began talking to us with apparent complete frankness. It must have been an hour, during which he explained this world of his, of which we were destined to have so brief a glimpse, and told us upon what diabolical errand he and his fellows were embarked. I recall that as he talked Jane gripped me in horror. But she managed to smile when Tako smiled at her. He was naively earnest as he told us of his coming conquest. And Jane, with woman's intuition knew before Don and I realized it, that it was to herself, a beautiful girl of Earth, he was talking, seeking her admiration for his prowess.

Tako was what in Europe of the Middle Ages would have amounted to a feudal prince. He was one of many here in this realm; each had his little domain, with his retainers cultivating his land, paying fees to him so that the overlord lived in princely idleness.

SCATTERED at considerable distances, one from the other, these rulers of their little principalities were loosely bound into a general government; but at home each was a law unto himself. They lived in princely fashion, these lords of the castle, as they were called. Among the retainers, monogamy was practiced. The workers had their little families—husband, wife and children. But for the rulers, more than one wife was the rule. Within each castle was a

harem of beauties, drawn perforce from the common people. The most beautiful girls of each settlement were trained from childhood to anticipate the honor of being selected by the master for a life in the castle.

They were connoisseurs of woman's beauty, these overlords. By the size of his harem and the beauty and talent of its inmates was an overlord judged by his fellows.

Out of this had grown the principal cause for war in the history of the realm. Beautiful girls were scarce. Raids were made by one lord upon the village and harem of another.

Then had come to Tako the discovery of the great world of our Earth, occupying much of this same space in another state of matter.

"I discovered it," he said with his gaze upon Jane.

"How?" Don demanded.

"It came," he said, "out of our scientific method of transportation, which very soon I will show you. We are a scientific people. Hah!" He laughed ironically. "The workers say that we princes are profligate—that we think only of women and music. But that is not so. Once, many generations ago, we were a tremendous nation, and skilled in science far beyond your own world—and with a population a hundred times what we have now. The land everywhere must have been rich and fertile. There were big cities—the ruins of them are still to be seen.

"AND then our climate changed. There was, for us, a world catastrophe, the cause and the details of which no one now knows very clearly. It sent our cities, our great civilizations into ruins. It left us with this barren waste with only occasional lowland fertile spots which now by heredity we rulers control, each to possess his own.

"But that past civilization gave us a scientific knowledge. Much of it is lost—we are going down hill. But we have some of it left, and we profligate rulers, as the workers call us, cherish it. But what is the use of teaching it to the common people? We do very little of that. And our weapons of war we keep to ourselves—except when there is a raid and our loyal retainers go forth with us to do battle."

"So you discovered how to get into our Earth world?" Don repeated.

"Yes. Some years ago, and it was quite by chance. At first I experimented alone—and then I took with me a young girl."

Again he smiled at Jane. "Tolla is her name. She is here in our camp where our army is now, starting for New York. You will meet her presently. She loves me very much, so she says. She wants some day to lead my harem. I took her with me into the Unknown—into that place you call Bermuda. I have been there off and on for nearly a year of your Earth time, making my plans for what now is at last coming to pass."

"So that's how you learned our language?" I said.

"Yes. It came easy to me and Tolla. That—and we were taught by two girls whom a year ago I took from Bermuda and brought in here."

"And what became of them?" Jane put in quietly.

"Oh—why, I gave them away," he replied calmly. "A prince whose favor I desired, wanted them and I gave them to him. Your Earth girls are well liked by the men of my world. Their fame has already spread."

HE added contemplatively, "I often have thought how strange it is that your great world and mine should lie right here together—the one invisible to the other. Two or three minutes of time—we have just made the transition. Yet what a void!"

"The scientists of your past civilization," I said, "strange that they did not learn to cross it."

"Do you know that they did not?" he demanded. "Perhaps with secret visitations—"

It brought to us a new flood of ideas. We had thought, up there in St. Georges, that this Tako was a ghost. How could one say but that all or most manifestations of the occult were not something like this. The history of our Earth abounds with superstition. Ghosts—things unexplained. How can one tell but that all occultism is merely unknown science? Doubtless it is. I can fancy now that in the centuries of the past many scientists of this realm of the Fourth Dimension ventured forth a litle way toward our world. And seeing them, we called them ghosts.

What an intrepid explorer was this Tako! An enterprising scoundrel, fired with a lust for power. He told us now, chuckling with the triumph of it, how carefully he had studied our world. Appearing there, timidly at first, then with his growing knowledge of English, boldly living in Hamilton.

His fame in his own world, among his fellow rulers, rapidly grew. The few Earth girls he produced were eagerly seized. The fame of their beauty spread. The desire, the competition for them became keen. And Tako gradually conceived his great plan. A hundred or more of the overlords, each with his hundred retainers, were banded together for the enterprise under Tako's leadership. An army was organized; weapons and equipment were assembled.

Earth girls were to be captured in large numbers. The most desirable of them would go into the harems of the princes. The others would be given to the workers. The desire for them was growing rapidly, incited by the talk of the overlords. The common man could have more than one wife—two, even three perhaps—supported by the princely master. And Tako was dreaming of a new Empire; increased population; some of the desert reclaimed; a hundred principalities banded together into a new nation, with himself as its supreme leader.

AND then the attack upon Earth had begun. A few Earth girls were stolen; then more, until very quickly it was obvious that a wider area than Bermuda was needed. Tako's mind flung to New York—greatest center of population within striking distance of him.* The foray into Bermuda—the materialization of that little band on the Paget hilltop was more in the nature of an experiment than a real attack. Tako learned a great deal of the nature of this coming warfare, or thought he did.

As a matter of actuality, in spite of his dominating force, the capacity for leadership which radiated from him, there was a very naive, fatuous quality to this strange ruler. Or at least, Don and I thought so now. As the details of his plot against our Earth world unfolded to us, what we could do to circumvent him ran like an undercurrent across the background of our consciousness. He knew

* The extent of the Fourth Dimensional world was never made wholly clear to us. Its rugged surface was coincident with the surface of our earth at Bermuda, at New York City, and at many points along the Atlantic seaboard of the United States. For the rest, there is no data upon which one may even guess.

nothing, or almost nothing of our Earth weapons. What conditions would govern this unprecedented warfare into which he was plunging—of all that he was totally ignorant.

BUT we were speedily to learn that he was not as fatuous as he at first seemed. These two worlds—occupying the same space and invisible to each other—would be plunged into war. And Tako realized that no one, however astute, of either world could predict what might happen. He was plunging ahead, quite conscious of his ignorance. And he realized that there was a vast detailed knowledge of the Earth world which we had and he did not. He would use us as the occasion arose to explain what might not be understandable to him.

I could envisage now so many things of such a character. The range of warships and artillery. The weapons a plane might use. The topography of New York City and its environs. . . . And the more Tako needed us, the less we had to fear from him personally. We would have the power to protect Jane from him—if we could sufficiently persuade him he needed our good will. Ultimately we might plunge his enterprise into disaster, and with Jane escape from him—that too I could envisage as a possibility.

The mind flings far afield very rapidly! But I recall that it occurred to me also that I might be displaying many of the fatuous qualities I was crediting to Tako, by thinking such thoughts!

I have no more than briefly summarized the many things Tako told us during that hour while we strode across the dim rocky uplands toward his mobilized army awaiting its departure for the scene of the main attack. Some of his forces had already gone ahead. Several bands of men were making visual contact with the seacoast of the southern United States. It was all experimentation. They were heading for New York. They would wait there, and not materialize until this main army had joined them.

We saw presently, in the distance ahead of us, a dim green sheen of light below the horizon. Then it disclosed itself to be quite near—the reflection of green light from a bowl-like depression of this rocky plateau.

We reached the rim of the bowl. The encampment of Tako's main army lay spread before us.

CHAPTER VIII

The Flight through the Fourth Dimension

"THIS is the girl, Tolla," said Tako quietly. "She will take care of you, Jane, and make you comfortable on this trip."

In the dull green sheen which enveloped the encampment, this girl of the Fourth Dimension stood before us. She had greeted Tako quietly in their own language, but as she gazed up into his face it seemed that the anxiety for his welfare turned to joy at having him safely arrive. She was a small girl; as small as Jane, and probably no older. Her slim figure stood revealed, garbed in the same white woven garments as those worn by the men. At a little distance she might have been a boy of Earth, save that her silvery white hair was wound in a high conical pile on her head, and there were tasseled ornaments on her legs and arms.

Her small oval face, as it lighted with pleasure at seeing Tako, was beautiful. It was delicate of feature; the eyes pale blue; the lips curving and red. Yet it was a curi-

ous face, by Earth standards. It seemed that there was an Oriental slant to the eyes; the nose was high-bridged; the eyebrows were thin pencil lines snow-white, and above each of them was another thin line of black, which evidently she had placed there to enhance her beauty.

Strange little creature! She was the only girl of this world we were destined to meet; she stood beside Jane, seemingly so different, and yet, we were to learn, so humanly very much the same. Her quiet gaze barely touched Don and me; but it clung to Jane and became inscrutable.

"We will travel together," Tako said. "You make her comfortable, Tolla."

"I will do my best," she said; her voice was soft, curiously limpid. "Shall I take her now to our carrier?"

"Yes."

It gave me a pang to see Jane leave with her; Don shot me a sharp, questioning glance but we thought it best to raise no objection.

"Come," said Tako. "Stay close by me. We will be in the carrier presently."

THERE was an area here in the bowl-like depression of at least half a mile square upon which an assemblage of some five thousand or more men were encamped. It was dark, though an expanse of shifting shadows and dull green light mingled with the vague phosphorescent sheen from the rocks. The place when we arrived was a babble of voices, a confusion of activity. The encampment, which obviously was temporary—perhaps a mobilization place—rang with the last minute preparations for departure. Whatever habitations had been here now were packed and gone.

Tako led us past groups of men who were busy assembling and carrying what seemed equipment of war toward a distant line of oblong objects into which men were now marching.

"The carriers," said Tako. He greeted numbers of his friends, talking to them briefly, and then hurried us on. All these men were dressed similarly to Tako, but I saw none so tall, nor so commanding of aspect. They all stared at Don and me hostilely, and once or twice a few of them gathered around us menacingly. But Tako waved them away. It brought me a shudder to think of Jane crossing this camp. But we had watched Tolla and Jane starting and Tolla had permitted none to approach them.

"Keep your eyes open," Don whispered. "Learn what you can. We've got to watch our chance—" We became aware that Tako was listening. Don quickly added, "I say, Bob, what does he mean—carriers?"

I shrugged. "I don't know. Ask him."

We would have to be more careful; it was obvious that Tako's hearing was far keener than our own. He was fifteen feet away, but he turned his head at once.

"A carrier you would call in Bermuda a tram. Or a train, let us say." He was smiling ironically at our surprise that he had overheard us. He gestured to the distant oblong objects. "We travel in them. Come, there is really nothing for me to do; all is in readiness here."

THE vehicles stood on a level rocky space at the farther edge of the camp. I think, of everything I had seen in this unknown realm, the sight of these vehicles brought the most surprise. The glimpse we had had of Tako's feudal castle seemed to suggest primitiveness.

But here was modernity—supermodernity. The vehicles—there were perhaps two dozen of them—were all apparently of similar character, differing only in size.

They were long, low oblongs. Some were much the size and shape of a single railway car; others twice as long; and several were like a very long train, not of single joined cars, but all one structure. They lay like white serpents on the ground—dull aluminum in color with mound-shaped roofs slightly darker. Rows of windows in their sides with the interior greenish lights, stared like round goggling eyes into the night.

When we approached closer I saw that the vehicles were not of solid structure, but that the sides seemingly woven of wire-mesh—or woven of thick fabric strands.*

The army of white figures crowded around the vehicles. Boxes, white woven cases, projectors and a variety of disks and dials and wire mechanisms were being loaded aboard. And the men were marching in to take their places for the journey.

Tako gestured. "There is our carrier."

It was one of the smallest vehicles—low and streamlined, so that it suggested a fat-bellied cigar, white-wrapped. It stood alone, a little apart from the others, with no confusion around it. The green-lighted windows in its sides goggled at us.

WE entered a small porte at its forward pointed end. The control room was here, a small cubby of levers and banks of dial-faces. Three men, evidently the operators, sat within. They were dressed like Tako save that they each had a great round lens like a monocle on the left eye, with dangling wires from it leading to dials fastened to the belt.

Tako greeted them with a gesture and a gruff word and pushed us past them into the car. We entered a low narrow white corridor with dim green lights in its vaulted room. Sliding doors to compartments opened from one side of it. Two were closed; one was partly open. As we passed, Tako called softly:

"All is well with you, Tolla?"

"Yes," came the girl's soft voice.

I met Don's gaze. I stopped short and called:

"Are you all right, Jane?"

I was immensely relieved as she answered, "Yes, Bob."

Tako shoved me roughly. "You presume too much."

The corridor opened into one main room occupying the full ten-foot width of the vehicle and its twenty-foot middle section. Low soft couch seats were here, and a small table with food and drink upon it; and on another table low to the floor, with a mat-seat beside it, a litter of small mechanical devices had been deposited. I saw among them two or three of the green-light hand weapons.

Tako followed my gaze and laughed. "You are transparent. If you knew how to use those weapons, do you think I would leave them near you?"

We were still garbed in the white garments, but the disks and wires and helmet had been taken from us.

"I say, you needn't be so suspicious," Don protested. "We're not so absolutely foolish. But if you want any advice from us on how to attack New York, you've got to explain how your weapons are used."

* The vehicles were constructed of a material allied in character to that used for garments by the people of this realm. It was not metal, but an organic vegetable substance.

TAKO seated us. "All in good time. We shall have opportunity now to talk."

"About the trip—" I said. "Are we going to New York City?"

"Yes."

"How long will it take?"

"Long? That is difficult to say. Have you not noticed that time in my world has little to do with yours?"

"How long will it seem?" I persisted.

He shrugged. "That is according to your mood. We shall eat once or twice, and get a little sleep."

One of the window openings was beside us with a loosely woven mesh of wires across it. Outside I could see the shifting lights. Men were embarking in the other vehicles; and the blended noise from them floated in to us.

Questions flooded me. This strange journey, what would it be like? I could envisage the invisible little Bermuda in the void of darkness over us now; or here in this same space around us. No, we had climbed from where we landed in the space close under the Paget hilltop. And we had walked forward for perhaps an hour. The space of Bermuda would be behind us and lower down. This then was the open ocean. I gazed at the solid rocky surface outside our window. Nearly seven hundred miles away must be New York City. We were going there. How? Would it be called flying? Or following this rocky surface?

As though to answer my thoughts Tako gestured to the window. "See. The first carrier starts away."

The carrier lay like a stiff white reptile on the ground. Its doors were closed, and watching men stood back from it.

Don gasped, "Why—it's fading! A transition!"

IT glowed along all its length and grew tenuous of aspect, until in a moment that solid thing which had been solidly resting there on a rock was a wraith of vehicle. A great oblong apparition—the ghost of a reptile with round green spots on its sides. A fading wraith. But it did not quite disappear. Hovering just within visibility, it slowly, silently slid forward. It seemed, without changing its level, to pass partly through an upstanding crag which stood in its path. Distance dimmed it, dwindled it; and in a moment it was gone into the night.

"We will start," said Tako abruptly. "Sit where you are. There will be a little shock, much like the transition coming in from your world." He called, "Tolla, we start."

A signal-dial was on the room wall near him. He rose and pressed its lever. There was a moment of silence. Then the current went on. It permeated every strand of the material of which the vehicle was constructed. It contacted with our bodies. I felt the tingle of it; felt it running like fire through my veins. The whole interior was humming. There was a shock to my senses, swiftly passing, followed by a sense of weightless freedom. But that lightness was an illusion, a comparison with externals only, for the seat to which I clung remained solid, and my body pressed upon it with a feeling of normal weight.

Outside the window, the dark scene of rocks and vehicles and men was fading; turning ghostly, shadowy, spectral. But it did not quite vanish; it held its wraithlike outlines, and in a moment began sliding silently backward. It seemed that we also passed through a little butte of rocks. Then we emerged again into the open; and, as we gathered speed, the vague

spectral outlines of a rocky landscape slid past us in a bewildering panorama.

We were away upon the journey.*

THERE was little to see during this strange flight. Outside our windows gray shadows drifted swiftly past—a shadowy, ghostly landscape of gray rocks. Some-

* What we learned of the science of the invisible realm was perforce picked piecemeal by us from all that we saw, experienced, and what several different times Tako was willing to explain to us. And it was later studied by the scientists of our world, whose additional theories I can incorporate into my own knowledge. Yet much of it remains obscure. And it is so intricate a subject that even if I understood it fully I could do no more than summarize here its fundamental principles.

The space-transition of these vehicles, Tako had already told us, was closely allied to the transition from his world to ours. And the weapons were of the same principles. The science of space-transition, limited to travel from one portion of the realm to another, quite evidently came first. The weapons, the forcible, abrupt transition of material objects out of the realm into other dimensions—into the Unknown—this principle was developed from the traveling. And from them both Tako himself evolved the safe and controlled transition from his world to ours.

Concerning the operation of these vehicles: Motion, in our Earth-world or any other, is the progressive change of a material object in relation to its time and space. It is here now, but it *was there.* Both space and time undergo a simultaneous change; the object itself remains unaltered, save in its *position.*

In the case of the vehicles, the current I have already mentioned (used in the mechanism for the transition from Earth to the other realm) that current, circulating in the organic material of which the vehicle was composed, altered the state of matter of the carrier and everything within the aura of the current's field. The vehicle and all its contents, with altered inherent vibratory rate of its molecules, atoms and electrons, was in effect projected into another world. A new dimension was added to it. It became an imponderable wraith, resting dimly visible in a sort of borderland upon the fringe of its own world.

Yet it had not changed *position.* It still remained quiescent. Then the current was further altered, and the time and space co-ordinates set into new combinations. This change of the current was a *progressive* change. Controlled and carefully calculated by what intricate theoretic principles and practical mechanisms no scientist of our world can yet say.

It is clear, however, that as this progressive change in space-time characteristics began, the vehicle perforce must move slightly in space and time to reconcile itself to the change.

There never has been a seemingly more abstruse subject for the human mind to grasp than the theories involving a true conception of space-time. Yet, doubtless, to those of Tako's realm, inheriting, let me say, the consciousness of its reality, there was nothing abstruse about it.

An analogy may make it clearer. The vehicle, hovering in the borderland, might be called in a visible but gaseous state. A solid can be turned to gas merely by the alteration of the vibratory rate of its molecules.

This unmoving (gaseous) vehicle, is now further altered in space-time characteristics. Suppose we say it is very slightly thrown out of tune with its *spatial* surroundings at the time which is its *present.* Nature will allow no such disorganization. The vehicle, as a second of *time* passes, is impelled by the force of nature to be in a *different place.* This involves motion. A small change in the first second. Then the current alters it progressively faster. The change, of necessity, is progressively greater, the motion more rapid.

And this, controlled as to direction, became transportation. The determination of direction at first thought seems amazingly intricate. In effect, that was not so. With space-time factors set as a destination, i. e., the place where the vehicle must end its change at a certain time, all the intermediate changes become automatic. With every passing second it must be at a reconcilable place—the direction of its passage perforce being the shortest path between the two.

With this in mind, the transition from one world to another becomes more readily understandable. No *natural* change of space is involved, merely the change of the state of matter. It was the same change as that which carried the vehicles into a shadowy borderland, and then pushed further into new dimensional realms.

The green light-beam weapons were merely another application of the same principle. The characteristics of the green light current, touching organic matter, altered the vibratory rate of what was struck to coincide with the light. A solid cake of ice under a blow-torch becomes steam by the same principle. The light-beams were swift and violent in their action. The change in them was progressive also—but it was so swiftly violent a change that nothing living could survive the shock of the enforced transition.

times it was below us, so that we seemed in an airship winging above it. Then abruptly it would rise over us and we plunged into it as though it were a mere light-image, a mirage.

Hours passed. For the most part the shadowy void seemed a jagged mountainous terrain, a barren waste. There were great plateau uplands, one of which rose seemingly thousands of feet over us. And there was perhaps an hour of time when the surface of the world had dropped far away, so far down that it was gone in the distance. Like a projectile we sped level, unswerving. And at last the shadows of the landscape came up again. And occasionally we saw shadowy inhabited domains—enclosing walls around water and vegetation, with a frowning castle and its brood of mound-shaped little houses like baby chicks clustered around the mother hen.

Tako served us with a meal; it was strange food, but our hunger made it palatable. Jane and Tolla remained in their nearby cabin. We did not see them, but occasionally Don or I, ignoring Tako's frown, called out to Jane, and received her ready answer.

Occasionally also, we had an opportunity to question Tako. He had begun tell us the general outline of his plans. The important fact was that the army would mobilize just within visibility of New York.

"Nothing can touch us then," Tako said. "You will have to explain what weapons will be used against me. Particularly the long-range weapons are interesting. But you have no weapons which could penetrate into the shadows of the borderland, have you?"

"No," said Don. "But your weapons—" He tried not to seem too intent. "Look here, Tako, I don't just understand how you intend to conquer New York."

"Devastate it," Tako interrupted. "Smash it up, and then we can materialize and take possession of it. My object is to capture a great number of young women—beautiful young women."

"How?" I demanded. "By smashing up New York? There are thousands of young women there, but you would kill them in the process. Now if you would try some other locality. For instance, I could direct you to open country—"

HE understood my motive. "I ask not that kind of advice. I will capture New York; devastate it. I think then your rulers will be willing voluntarily to yield all the captives I demand. Or, if not, then we will plan to seize them out of other localities."

Don said, "Suppose you tell us more clearly just how you expect to smash New York, as you call it. First, you will gather, not materialized, but only visible to the city."

"Exactly. That will cause much excitement, will it not? Panics—terror. And if we are only wraiths, no weapons of your world can attack us."

"Nor can yours attack the city. Can they?"

He did not at first answer that; and then he smiled. "Our hand light-projectors could not penetrate out from the borderland without losing their force. But we have bombs. You shall see.* The bombs alone will devastate New York, if we choose to use them. I have also a long-range projector of the green

* Materialization bombs, we afterward called them; they played a diabolical part in the coming events. They were of many sizes and shapes, but most of them were small in size and shape, like a foot-long wedged-shaped brick, or the head of an ax. They were constructed of organic material, with a wire mesh of the transition mechanism encasing them, and an automatic operating device like the firing fuse of a bomb.

light-beam. It is my idea, when the city is abandoned by the enemy that we can take possession of some prominent point of vantage. A tall building, perhaps." He smiled again his quiet grim smile. "We will select one and be careful to leave it standing. I will materialize with our giant projector, dominate all the region and then we can barter with your authorities. It is your long-range guns I most fear. When the projector is materialized—and we are ready to bargain—then your airplanes, warships lying far away perhaps, might attack. Suppose now you explain those weapons to me."

FOR an hour or more he questioned us. He was no fool, this fellow; he knew far more of the conditions ahead of him than we realized. I recall that once I said:

"You have never been in New York?"

"No. Not materialized. But I have observed it very carefully."

As a lurking ghost!

"We have calculated," he went on, "the space co-ordinates with great precision. That is how we have been able to select the destination for this carrier now. You cannot travel upon impulse by this method. Our engineers, as you might call them, must go in advance with recording apparatus. Nothing can be done blindly."

It brought to my mind the three pilots now operating our vehicle. I mentioned the lens on their left eyes like a monocle.

"With that they can see ahead of us a great distance. It flings the vision—like gazing along a beam of light—to space-time factors in advance of our present position. In effect, a telescope."

THERE were a few hours of the journey when Don and I slept, exhausted by what we had been through. Tako was with us when we dozed off, and I recall that he was there when we awakened. How much time passed we could not tell.

"You are refreshed?" he said smilingly. "And hungry again, no doubt. We will eat and drink—and soon we will arrive at the predestined time and place."

We were indeed hungry again. And while we were eating Tako gestured to the window. "Look there. Your world seems visible a little."

Just before we slept it had seemed that mingled with the shadows of Tako's world was the gray outline of an ocean surface beneath us. I gazed out at the dim void now. Our flight was far slower than before. We were slackening speed for the coming halt. And I saw now that the shadows outside were the mingled wraiths of two spectral worlds, with us drifting forward between and among them. The terrain of Tako's world was bleaker, more desolate and more steeply mountainous than ever. There were pits and ravines and gullies with jagged mountain spires, cliffs and towering gray masses of rock.

And mingled with it, in a general way coincidental with it in the plane of the same space, we could see now the tenuous shapes of our own world. Vague, but familiar outlines! We had passed Sandy Hook! The ocean lay behind us. A hundred feet or so beneath us was the level water of the Lower Bay.

"Don!" I murmured. "Look there! Long Island off there! And that's Staten Island ahead of us!"

"Almost at our destination," Tako observed. And in a moment he gestured again. "There is your city. Have a good look at your dear New York."

DIAGONALLY ahead through the window we saw the spectres of the great pile of masonry on lower and mid-Manhattan. Spectres of the giant buildings; the familiar skyline, and mingled with it the ghostly gray outlines of the mountains and valley depths of Tako's world. All intermingled! The mountain peaks rose far higher than the tallest of New York's skyscrapers; and the pits and ravines were lower than the waters of the harbor and rivers, lower than the subways and the tubes and the tunnels.

"Another carrier!" Don said abruptly. "See it off there!"

It showed like a great gray projectile coming in level with us. And then we saw two others in the distance behind us. Fantastic, ghostly arrival of the enemy! Weird mobilization here within the space of the doomed New York.

"Can they see us?" I murmured. "Tako, the people down there on Staten Island—can they see us?"

"Yes," he smiled. "Don't you think so? Look! Are not those ships of war? Hah! Gathered already—awaiting our coming!"

I have already given a brief summary of the events of the days and nights just past here in New York. The terror at the influx of apparitions. The panic of the city's teeming millions struggling too eagerly to escape.

It was night now—the night of May 19th. The city was in chaos, but none of the details were apparent to us as we arrived. But we could see, as we drifted with slow motion above the waters of the harbor, that there were warships anchored here, and in the Hudson River. They showed as little spectral dots of gray. And in the air, level with us at times, the wraiths of encircling airplanes were visible.

"They see us," Tako repeated.

They did indeed. A puff of light and up-rolling smoke came from one of the ships. A silent shot. Perhaps it screamed through us, but we were not aware of it.

Tako chuckled. "They get excited, do they not? We strike terror—are they going to fight like excited children?"

WE were under sudden bombardment. Fort Wadsworth was firing; puffs showed from several of the warships; and abruptly a group of ghostly monoplanes dove at us like birds. They went through us, emerged and sped away. And in a moment the shots were discontinued.

"That is better," said Tako. "What a waste of ammunition."

Our direction was carrying us from mid-Manhattan. The bridges to Brooklyn were visible. Beyond them, over New York, mingled with teeming buildings was a mountain slope of Tako's realm. I saw one of our carriers lying on a ledge of it.

A sudden commotion in our car brought our attention from the scene outside. The voices of girls raised in anger. Tolla's voice and Jane's! Then came the sound of a scuffle!

"By what gods!" Tako exclaimed.

We all leaped to our feet. Tako rushed for the door of the compartment with us after him. We burst in upon the girls. They were standing in the center of the little room. One of the chairs was overturned. Jane stood gripping Tolla by the wrists, and with greater strength was forcibly holding her.

As we appeared, Jane abruptly released her, and Tolla sank to the floor and burst into wild sobs. Jane faced us, red and white of face, and herself almost in tears.

"What's the matter?" Don demanded. "What is it?"

But against all our questionings both girls held to a stubborn silence.

CHAPTER IX

A Woman Scorned

JANE afterward told us just what happened in that compartment of the carrier, and I think that for the continuity of my narration I had best relate it now.

The cubby room was small, not much over six feet wide, and twelve feet long. There was a single small door to the corridor, and two small windows. A couch stood by them; there were two low chairs, and a small bench-like table.

Tolla made Jane as comfortable as possible. Food was at hand; Tolla, after an hour or two served it at the little table, eating the meal with Jane, and sitting with her on the couch where they could gaze through the windows.

To Jane this girl of another world was at once interesting, surprising and baffling. Jane could only look upon her as an enemy. In Jane's mind there was no thought save that we must escape, and frustrate Tako's attack upon New York; and she was impulsive, youthful enough to think something might be contrived.

At all events, she saw Tolla in the light of an enemy who might be tricked into giving information.

Jane admits that her ideas were quite as vague as our own when it came to planning anything definite.

She at first studied Tolla, who seemed as young as herself and perhaps in her own world, was as beautiful. And within an hour or two she was surprised at Tolla's friendliness. They had dined together, gazed through the windows at the speeding shadows of the strange world sliding past; they had dozed together on the couch. During all this they could have been schoolgirl friends. Not captor and captive upon these strange weird circumstances of actuality, but friends of one world. And in outward aspect Tolla could fairly well have been a cultured girl of our Orient.

THEN Jane got a shock. She tried careful questions. And Tolla skillfully avoided everything that touched in any way upon Tako's future plans. Yet her apparent friendliness, and a certain girlish volubility continued.

And then, at one point, Tolla asked:

"Are you beautiful in Bermuda?"

"Why, yes," said Jane. "I guess so."

"I am beautiful in my world. Tako has said so."

"You love him, don't you?" Jane said abruptly.

"Yes. That is true." There was no hint of embarrassment. Her pale blue eyes stared at Jane, and she smiled a little quizzically. "Does it show so quickly upon my face that you saw it at once? I am called Tolla because I am pledged soon to enter Tako's harem."

Upon impulse Jane put her arm around the other girl as they sat on the couch. "I think he is very nice."

But she saw it was an error. The shadow of a frown came upon Tolla's face; a glint of fire clouded her pale, serene eyes.

"He will be the greatest man of his world," she said quietly.

THERE was an awkward silence. "The harem, I am told," Jane said presently, "is one of your customs." She took a plunge. "And Tako told us why they want our Earth girls. There was one of

my friends stolen from Bermuda—"

"And yet you call him very nice," Tolla interrupted with sudden irony. "Girls are frank in our world. But you are not. What did you mean by that?"

"I was trying to be friendly," said Jane calmly. "You had just said you loved him."

"But you do not love him?"

It took Jane wholly back. "Good Heavens, no!"

"But he—might readily love you?"

"I hope not!" Jane tried to laugh, but the idea itself was so frightening to her that the laugh sounded hollow. She gathered her wits. This girl was jealous. Could she play upon that jealousy? Would Tolla perhaps soon want her to escape? The idea grew. Tolla might even some time soon come to the point of helping her escape.

Jane said carefully, "I suppose I was captured with the idea of going into someone's harem. Was that the idea?"

"I am no judge of men's motives," said Tolla curtly.

"Tako said as much as that," Jane persisted. "But not necessarily into his harem. But if it should be his, why would you care? Your men divide their love—"

"I would care because Tako may give up his harem," Tolla interrupted vehemently. "He goes into this conquest for power—for wealth—because soon he expects to rule all our world and band it together into a nation. He has always told me that I might be his only wife—some day—"

SHE checked herself abruptly and fell into a stolid silence. It made Jane realize that under the lash of emotion Tolla would talk freely. But Jane could create no further opportunity then, for Tako suddenly appeared at their door. The girls had been together now some hours. Don and I were at this time asleep.

He stood now at the girl's door. "Tolla, will you go outside a moment? I want to talk to this prisoner alone." And, interpreting the look which both girls flung at him, he added, "The door remains open. If she wants you back, Tolla, she will call."

Without a word Tolla left the compartment. But Jane saw on her face again a flood of jealousy.

Tako seated himself amiably. "She has made you comfortable?"

"Yes."

"I am glad."

He passed a moment of silence. "Have you been interested in the scene outside the window?" he added.

"Yes. Very."

"A strange sight. It must seem very strange to you. This traveling through my world—"

"Did you come to tell me that?" she interrupted.

He smiled. "I came for nothing in particular. Let us say I came to get acquainted with you. My little prisoner—you do not like me, do you?"

She tried to meet his gaze calmly. This was the first time Jane had had opportunity to regard Tako closely. She saw now the aspect of power which was upon him. His gigantic stature was not clumsy, for there was a lean, lithe grace in his movements. His face was handsome in a strange foreign fashion. He was smiling now; but in the set of his jaw, his wide mouth, there was an undeniable cruelty, a ruthless dominance of purpose. And suddenly she saw the animal-like aspect of him; a thinking, reasoning, but ruthless, animal.

"You do not like me, do you?" he repeated.

SHE forced herself to reply calmly, "Why should I? You abduct my friends. There is a girl named Eunice Arton whom you have stolen. Where is she?"*

He shrugged. "You could call that the fortunes of war. This is war—"

"And you," she said, "are my enemy."

"Oh, I would not go so far as to say that. Rather would I call myself your friend."

"So that you will return me safely? And also Bob Rivers, and my cousin, Don—you will return us safely as you promised?"

"Did I promise? Are you not prompting words from my lips?"

Jane was breathless from fear, but she tried not to show it.

"What are you going to do with us?" she demanded. There is no woman who lacks feminine guile in dealing with a man; and in spite of her terror Jane summoned it to her aid.

"You want me to like you, Tako?"

"Of course I do. You interest me strangely. Your beauty—your courage—"

"Then if you would be sincere with me—"

"I am; most certainly I am."

"You are not. You have plans for me. I told Tolla I supposed I was destined for someone's harem. Yours?"

It startled him. "Why—" He recovered himself and laughed. "You speak with directness." He suddenly turned solemn. He bent toward her and lowered his voice; his hand would have touched her arm, but she drew away.

"In very truth, ideas are coming to me, Jane. I will be, some day soon, the greatest man of my world. Does that attract you?"

"N-no," she said, stammering.

"I wish that it would," he said earnestly. "I do of reality wish that it would. I will speak plainly, and it is in a way that Tako never spoke to woman before. I have found myself, these last hours, caring very much for your good opinion of me. That is surprising."

SHE stared at him with sudden fascination mingled with her fear. He seemed for this moment wholly earnest and sincere. An attractive sort of villain, this handsome giant, turned suddenly boyish and naive.

"That is surprising," Tako repeated.

"Is it?"

"Very. That I should care what any woman thinks of me, particularly a captive girl—but I do. And I realize, Jane, that our marriage system is very different from yours. Repugnant to you, perhaps. Is it?"

"Yes," she murmured. His gaze held her; she tried to shake it off, but it held her.

"Then I will tell you this: I have always felt that the glittering luxury of a large harem is in truth a very empty measure of man's greatness. For Tako there will be more manly things. The power of leadership—the power to rule my world. When I got that idea, it occurred to me also that for a man like me there might be some one woman—to stand alone by my side and rule our world."

His hand touched her arm, and though she shuddered, she left it there. Tako added with a soft vibrant tenseness. "I am beginning to think that you are that woman."

There was a sound in the corridor outside the door—enough to cause Tako momentarily to swing

* Neither Eunice Arton, nor any of the stolen girls, have ever been heard from since. Like the thousands of men, women and children who met their death in the attack upon New York, Eunice Arton was a victim of these tragic events.

his gaze. It broke the spell for Jane; with a shock she realized that like a snake he had been holding her fascinated. His gaze came back at once, but now she shook off his hand from her arm.

"Tolla told me you—you said something like that to her," Jane said with an ironic smile.

It angered him. The earnestness dropped from him like a mask. "Oh, did she? And you have been mocking me, you two girls?"

HE stood up, his giant length bringing his head almost to the vaulted ceiling of the little compartment. "What degradation for Tako that women should discuss his heart."

His frowning face gazed down at Jane; there was on it now nothing to fascinate her; instead, his gaze inspired terror.

"We—we said nothing else," she stammered.

"Say what you like. What is it to me? I am a man, and the clatter of women's tongues is no concern of mine."

He strode to the door. From over his shoulder he said, "What I shall do with you I have not yet decided. If Tolla is interested, tell her that."

"Tako, let me—I mean you do not understand—"

But he was gone. Jane sat trembling. A sense of defeat was on her. Worse than that, she felt that she had done us all immeasurable harm. Tako's anger might react upon Don and me. As a matter of fact, if it did he concealed it, for we saw no change in his attitude.

Tolla rejoined Jane within a moment. If Tako spoke to her outside Jane did not know it. But she was at once aware that the other girl had been listening; Tolla's face was white and grim. She came in, busied herself silently about the room.

Jane turned from the window. You heard us, Tolla?"

"Yes, I heard you! You with your crooked look staring at him—"

"Why, Tolla, I did not!"

"I saw you! Staring at him so that he would think you beautiful! Asking him, with a boldness beyond that of any woman I could ever imagine—asking him if he planned you for his harem!"

SHE stood over Jane, staring down with blazing eyes. "Oh, I heard you! And I heard him telling you how noble are his motives! One woman, just for him!"

"But, Tolla—"

"Do not lie to me! I heard him sneering at me—telling you of this one woman just for him! And you are that woman! Hah! He thinks that now, does he? He thinks he will make you love him as I love him. As I love him! And what does he know of that! What woman's love can mean!"

"Tolla! Don't be foolish. I didn't —I never had any desire to—"

"What do your desires concern me? He thinks he will win you with tales of his conquests! A great man, this Tako, because he will devastate New York!"

This was the fury of a woman scorned. She was wholly beside herself, her words tumbling, incoherent, beyond her will, beyond her realization of what she was saying.

"A great conquest to make you love him! With his giant projector he will subdue New York! Hah! What a triumph! But it is the weapon's power, not his! He and all his army—these great brave and warlike men—why I alone with that weapon could turn—"

She stopped abruptly. The red flush of frenzied anger drained from her cheeks.

Jane leaped to her feet. "What

do you mean? With that giant projector—"

But Tolla was standing frozen, with all her anger gone and horror at what she had said flooding her.

"What do you mean, Tolla?" insisted Jane, seizing her. "What could you do with that giant projector?"

"Let me go!" Tolla tried to jerk away.

"I won't let you go! Tell me what you were going to say!"

"Let me go!" Tolla got one hand loose and struck Jane in the face. But Jane again seized the wrist. In the scuffle they overturned a chair.

"I won't let you go until you—"

And then Tako, Don and I, hearing the uproar, burst in upon them. Jane let go her hold, and Tolla broke into sobs, and sank to the floor.

And both of them were sullen and silent under our questioning.

CHAPTER X

Weird Battleground!

"WE have it going very well," said Tako, chuckling. "Don't you think so? Sit here by me. We will stay here for a time now."

Tako had a small flat rock for a table. On it he had spread his paraphernalia for this battle—if battle it could be called. Weird contest! Opposing forces, each imponderable to the other so that no physical contact had yet been made. Tako sat at his rock; giving orders to his leaders who came hurrying up and were away at his command; or speaking orders into his sound apparatus; or consulting his charts and co-ordinates, questioning Don and me at times over the meaning of shadowy things we could see taking place about us.

A little field headquarters our post here might have been termed.*

We were grouped now around Tako on a small level ledge of rock. It lay on a broken, steeply ascending ramp of a mountainside. The mountain terraces towered back and above us. In front, two hundred feet down, was a valley of pits and craters; and to the sides a tumbled region of alternating precipitous cliffs and valley depths.

Upon every point of vantage, for two or three miles around us, Tako's men were dispersed. To us, they were solid gray blobs in the luminous darkness. The carriers, all arrived now, stood about a mile from us, and save for their guards, the men had all left them. The weapons were being taken out and carried to various points over the mountains and in the valley depths. Small groups of men—some two hundred in a group—were gathered at many different points, assembling their weapons, and waiting for Tako's orders. Messengers toiled on foot between them, climbing, white figures. Signals flashed.

Fantastic, barbaric scene—it seemed hardly modern. Mountain defiles were swarming with white invaders, making ready, but not yet attacking.

WE had had as yet no opportunity of talking alone with Jane since we left the carrier. The incident with Tolla was to us wholly inexplicable. But that it

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* The detailed nature of the scientific devices Tako used in the handling of his army during the attack never has been disclosed. I saw him using one of the eye-telescopes. There was also a telephonic device and occasionally he would discharge a silent signal radiance—a curious intermittent green flare of light. His charts of the topography of New York City were to me incomprehensible hieroglyphics—mathematical formula, no doubt; the co-ordinates of altitudes and contours of our world-space in its relation to the mountainous terrain of his world which stood mingled here with the New York City buildings.

was significant of something, we knew—by Jane's tense white face and the furtive glances she gave us. Don and I were ready to seize the first opportunity to question her.

Tolla, by the command of Tako, stayed close by Jane, and the two girls were always within sight of us. They were here now, seated on the rocks twenty feet from us. And the two guards, whom Tako had appointed at the carrier, sat near us with alert weapons, watching Jane and us closely.*

There was just once after we left the carrier, toiling over the rocks with Tako's little cortege to this vantage point on the ledge, that Jane found an opportunity of communicating secretly with us.

"Tolla told me something about the giant projector! Something about how it—"

She could say almost nothing but that. "The projector, Bob, if you can only learn how it—"

Tolla was upon us, calling to attract Tako's attention, and Jane moved away.

THE giant projector! We had it with us now; a dozen men had laboriously carried it up here. Not yet assembled, it stood here on the ledge—a rectangular gray box about the size and shape of a coffin, encased now in the mesh of transition mechanism. Tako intended to materialize us and that box into the city when the time came, unpack and erect the projector, and with its long range dominate all the surrounding country.

Tolla had almost told Jane something about it! Jane was trying to learn that secret. Or she thought we might learn it from Tako. But of what use if we did? We were helpless, every moment under the eyes of guards whose little hand-beams could in a second annihilate us. When, leaving the carrier, Jane had appeared garbed like the rest of us and we had all been equipped with the transition mechanism which we knew well how to use now, the thought came to me of trying to escape. But it was futile. I could set the switches at my belt to materialize me into New

* There was a thing which puzzled me before we arrived in the carrier, and surprised me when we left it; and though I did not, and still do not wholly understand it, I think I should mention it here. Traveling in the carrier we were suspended in a condition of matter which might be termed mid way between Tako's realm and our Earth-world. Both, in shadowy form, were visible to us; and to an observer on either world we also were visible.

Then, as the carrier landed, it receded from this sort of borderland as I have termed it, contacted with its own realm and landed. At once I saw that the shadowy outlines of New York were gone. And, to New York observers, the carriers as they landed, were invisible. The mountains—all this tumbled barren wilderness of Tako's world—were invisible to observers in New York.

But I knew now how very close were the two worlds—a very fraction of visible "distance," one from the other.

Then, with wires, disks and helmets—all the transition mechanism worn now by us and all of Tako's forces—we drew ourselves a very small fraction of the way toward the Earth-world state. Enough and no more than to bring it to most tenuous, most wraithlike visibility, so that we could see the shadows of it and know our location in relation to it, which was necessary to Tako's operations.

In this state, New York City was a wraith to us—and we were shadowy, dimly visible apparitions to New York observers. But in this slight transition, we did not wholly disconnect with the terrain of Tako's world. There was undoubtedly—if the term could be called scientific—a depth of field to the solidity of these mountains. By that I mean, their tangibility persisted for a certain distance toward other dimensions. Perhaps it was a greater "depth of field" than the solidity of our world possesses. As to that, I do not know.

But I do know, since I experienced it, that as we sat now encamped upon this ledge, the ground under us felt only a trifle different from when we had full contact with it. There was a lightness upon us—an abnormal feeling of weight-loss—a feeling of indefinable abnormality to the rocks. Yet, to observers in New York, we were faintly to be seen, and the rocks upon which we sat were not.

York. But as I faded, the weapons of the guards would have been quick enough to catch me. How could Jane, Don and I simultaneously try a thing like that.

"Impossible!" Don whispered. "Don't do anything wrong. Some chance may come, later."

But with that slight transition over, Tako at once removed from our belts a vital part of the mechanism in order to make it impotent.

An hour passed, here on the ledge, with most of the activity of Tako's men incomprehensible to us.

"You shall see very soon," he chuckled grimly, "I can give the signal to attack—all at once. Look there! They grow very bold, these New York soldiers. They have come to inspect us."

IT was night in New York City —about two A.M. of the night of May 19th and 20th. Our mountain ledge was within a store on the east side of Fifth Avenue at 36th Street. We seemed to be but one story above the pavement. The shadowy outlines of a large rectangular room with great lines of show-cases dividing it into wide aisles. I recognized it at once—a jewelry store, one of the best known in the world. A gigantic fortune in jewelry was here, some of it hastily packed in great steel safes nearby, and some of it abandoned in these show-cases when the panic swept the city a few days previously.

But the jewelry of our world was nothing to these White Invaders. Tako never even glanced at the cases, or knew or cared what sort of a store this was.

The shadowy street of Fifth Avenue showed just below us. It was empty now of vehicles and people, but along it a line of soldiers were gathered. Other stores and ghostly structures lay along Fifth Avenue. And five hundred feet away, diagonally across the avenue, the great Empire State Building, the tallest structure in the entire world, towered like a ghostly Titan into the void above us.

This ghostly city! We could see few details. The people had all deserted this mid-Manhattan now. The stores and hotels and office buildings were empty.

A group of soldiers came into the jewelry store and stood within a few feet of us, peering at us. Yet so great was the void between us that Tako barely glanced at them. He was giving orders constantly now. For miles around us his men on the mountains and in the valleys were feverishly active.

BUT doing what? Don and I could only wonder. A tenseness had gripped upon Tako. The time for his attack was nearing.

"Very presently now," he repeated. He gestured toward the great apparition of the Empire State Building so near us.

"I am sparing that. A good place for us to mount the projector—up there in that tall tower. You see where our mountain slope cuts through that building? We can materialize with the projector at that point.

The steep ramp of the mountainside upon which we were perched sloped up and cut midway through the Empire State Building. The building's upper portion was free of the mountain whose peaks towered to the west. We could climb from our ledge up the ramp to the small area where it intersected the Empire State at the building's sixtieth to seventieth stories.

The apparitions of New York's soldiers stood in the jewelry store with futile leveled weapons.

"They are wondering what we are doing!" Tako chuckled.

A dozen of Tako's men, unheeding the apparitions, were now busy within a few hundred feet of us down the rocky slope. We saw at close view, what Tako's army was busy doing everywhere. The men had little wedge-shaped objects of a gray material. The materialization bombs! They were placing them carefully at selected points on the rocks, and adjusting the firing mechanisms. This group near us, which Don and I watched with a fascinated horror, were down in the basement of the jewelry store, among its foundations. There for a moment; then moving out under Fifth Avenue, peering carefully at the spectral outlines of the cellars of other structures.

Then presently Tako called an order. He stood for a moment on the ledge with arms outstretched so that his men, and Don and I and Jane, and the wondering apparitions of the gathered soldiers and New York Police could see him. His moment of triumph! It marked his face with an expression which was utterly Satanic.

Then he dropped his arms for the signal to attack.

CHAPTER XI

The Devastation of New York

THAT night of May 19th and 20th in New York City will go down in history as the strangest, most terrible ever recorded. The panics caused by the gathering apparitions of the previous days were nearly over now. The city was under martial law, most of it deserted by civilians, save for the dead who still lay strewn on the streets.

Lower and mid-Manhattan were an empty shell of deserted structures, and silent, littered streets, which at night were dark, and through which criminals prowled, braving the unknown terror to fatten upon this opportunity.

Soldiers and police patrolled as best they could all of Manhattan, trying to clear the streets of the crushed and trampled bodies; seeking in the deserted buildings those who might still be there, trapped or ill, or hurt so that they could not escape; protecting property from the criminals who en masse had broken jail and were lurking here.

Warships lay in the harbor and the rivers. The forts on Staten Island and at Sandy Hook were ready with their artillery to attack anything tangible. Airplanes sped back and forth overhead. Troops were marching from outlying points—lines of them coming in over all the bridges.

By midnight of May 19th and 20th there were groups of ghosts visible everywhere about the city. They lurked in the buildings, permeating the solid walls, stalking through them, or down through the foundations; they wandered upon invisible slopes of their own world, climbing up to gather in groups and hanging in mid-air over the city rooftops. In the Hudson River off Grant's Tomb two or three hundred of the apparitions were seemingly encamped at a level below the river's surface. And others were in the air over the waters of the upper bay.

TOWARD midnight, from the open ocean beyond Sandy Hook spectral vehicles came winging for the city. Rapidly decreasing what had at first seemed a swift flight, they floated like ghostly dirigibles over the bay, heading for Manhattan. The forts fired upon them; airplanes darted at them, through them. But the wraiths came on unheeding. And then, gathering over Manhattan at

about Washington Square, they faded and vanished.

Within thirty minutes, though the vehicles never reappeared, it was seen that the spectral invaders were now tremendously augmented in numbers. A line of shapes marched diagonally beneath the city streets. Patrolling soldiers in the now deserted subways saw them marching past. The group in the air over the harbor was augmented. In Harlem they were very near the street levels, a mass of a thousand or more strung over an area of forty blocks.

In mid-Manhattan soldiers saw that Tiffany's jewelry store housed the lurking shapes. Some were lower, others higher; in this section around Fifth Avenue and Thirty-fourth Street the apparitions were at tremendously diverse levels. There were some perched high in the air more than half way up the gigantic Empire State Building; and still others off to the west were in the air fifteen hundred feet or more above the Pennsylvania Station.

AT Tiffany's—as indeed in many other places—the soldiers made close visual contact with the apparitions. A patrolling group of soldiers entered Tiffany's and went to the second floor. They reported a seated group of "ghosts," with numbers of white shapes working near them at a lower level which brought them into Tiffany's basement.

The soldiers thought that what was seated here might be a leader. Apparitions rushed up to him, and away. And here the soldiers saw what seemed the wraiths of two girls, seated quietly together, helmeted and garbed like the men. And men seemed watching them.

By one-thirty there was great activity, constant movement of the apparitions everywhere. Doing what? No one could say. The attack, so closely impending now, was presaged by nothing which could be understood.

There was one soldier who at about one-thirty A. M. was watching the spectres which lurked seemingly in the foundations of Tiffany's. He was called to distant Westchester where the harried Army officials had their temporary headquarters this night. He sped there on his motorcycle and so by chance he was left alive to tell what he had seen. The wraiths under Tiffany's were placing little wedge-shaped ghostly bricks very carefully at different points. It occurred to this soldier that they were putting them in spaces coincidental with the building's foundations.

And then came the attack. The materialization bombs—as we knew them to be—were fired. Progressively over a few minutes, at a thousand different points. The area seemed to be from the Battery to Seventy-second Street. Observers in circling airplanes saw it best—there were few others left alive to tell of it.

THE whole thing lasted ten minutes. Perhaps it was not even so long. It began at Washington Square. The little ghostly wedges which had been placed within the bricks of the arch at the foot of Fifth Avenue began materializing; turning solid. From imponderability they grew tangible; demanded free empty space of their own. Wedged and pushed with solidifying molecules and atoms, each demanding its little space and finding none. Encountering other solidity.

Outraged nature! No two material bodies can occupy the same space at the same time!

The Washington Arch very queerly seemed to burst apart by

a strangely silent explosion. The upper portion toppled and fell with a clatter of masonry littering the avenue and park.

Then a house nearby went down; then another. Everything seemed to be crumbling, falling. That was the beginning. Within a minute the chaos spread, running over the city like fire on strewn gasoline. Buildings everywhere came crashing down. The street heaved up, cracking apart in long jagged lines of opening rifts as though an earthquake were splitting them. The subways and tubes and tunnels yawned like black fantastic chasms crossed and littered by broken girders.

The river waters heaved with waves lashed white as the great bridges fell into them; and sucked down and closed again with tumultuous whirlpools where the water had rushed into the cracked tunnels of the river bed.

OF the towering skyscrapers the Woolworth was the first to crumble; it split into sections as it fell across the wreckage which already littered City Hall. Then the Bank of Manhattan Building, crumbling, partly falling sidewise, partly slumping upon the ruins of itself. Simultaneously the Chrysler Building toppled. For a second or two it seemed perilously to sway. Breathless, awesome seconds. It swayed over, lurched back like a great tree in a wind. Then very slowly it swayed again and did not come back. Falling to the east, its whole giant length came down in a great arc. The descent grew faster, until, in one great swoop it crashed upon the wreckage of the Grand Central Station. The roar of it surged over the city. The crash of masonry; the clatter of its myriad windows, the din of its rending, breaking girders.

The giant buildings were everywhere tumbling like falling giants; like Titans stricken by invisible tumors implanted in their vitals. It lasted ten minutes. What infinitude of horror came to proud and lordly Manhattan Island in those momentous ten minutes!

Ten thousand patrolling soldiers and police, bands of lurking criminals, and men, women and children who still had not left the city, went down to death in those ten minutes. Yet no observer could have seen them. Their little bodies, so small amid these Titans of their own creation, went into oblivion unnoticed in the chaos.

THE little solidifying bombs of the White Invaders did their work silently. But what a roar surged up into the moonlit night from the stricken city! What tumult of mingled sounds! What a myriad of splintering, reverberating crashes, bursting upward into the night; echoing away, renewed again and again so that it all was a vast pulsing throb of terrible sound. And under it, inaudible, what faint little sounds must have been the agonized screams of the humans who were entombed!

Then the pulse of the great roaring sound began slowing. Soon it became a dying roar. A last building was toppling here and there. The silence of death was spreading over the mangled litter of the strewn city. Dying chaos of sound; but now it was a chaos of color. Up-rolling clouds of plaster dust; and then darker, heavier clouds of smoke. Lurid yellow spots showed through the smoke clouds where everywhere fires were breaking up.

And under it, within it all, the vague white shapes of the enemy apparitions stood untouched, still peering curious, awed triumphant at what they had done.

Another ten minutes passed; then half an hour, perhaps. The apparitions were moving now. The many little groups were gathering into fewer, larger groups. One marched high in the air, with faint lurid green beams slanting down at the ruins of the city; not as weapons this time, but as beams of faint light, seemingly to illuminate the scene, or perhaps as signals to the ghostly army.

The warships in the Hudson were steaming slowly toward the Battery to escape. Searchlights from them, from the other ships hovering impotent in the bay, and from a group of encircling planes, flashed their white beams over the night to mingle with the glare of the fires and the black pall of smoke which was spreading now like a shroud.

THERE were two young men in a monoplane which had helplessly circled over mid-Manhattan. They saw the city fall, and noticed the lurking wraiths untouched amid the ruins and in the air overhead. And they saw, when it was over, that one great building very strangely had escaped. The Empire State, rearing its tower high into the serene moonlight above the wreckage and the rising layers of smoke, stood unscathed in the very heart of Manhattan. The lone survivor, standing there with the moonlight shining upon its top, and the smoke gathering black around its spreading base.

The two observers in the airplane, stricken with horror at what they had seen, flew mechanically back and forth. Once they passed within a few hundred feet of the standing giant. They saw its two hundred foot mooring mast for dirigibles rising above the eighty-five stories of the main structure. They saw the little observatory room up there in the mooring mast top, with its circular observation platform, a balcony around it. But they did not notice the figures on that balcony.

Then, from the top of the Empire State Building—from the circular observation platform—a single, horribly intense green light-beam slanted out into the night! A new attack! As though all which had gone before were not enough destruction, now came a new assault. The spectral enemies were tangible now!

THE single green light-beam was very narrow. But the moonlight could not fade it; over miles of distance it held visible. It struck first a passing airplane. The two observers in the monoplane were at this time down near the Battery. They saw the giant beam hit the airplane. A moment it clung, and parts of the plane faded. The plane wavered, and then, like a plummet, fell.

The beam swung. It struck a warship lying in the upper bay. Explosions sounded. Puffs of light flared. The ship, with all its passengers vanished and gone, lay gutted and empty.

The source of the light moved rapidly around the circular balcony. The light darted to every distant point of the compass. The surprised distant ships and forts, realizing that here for the first time was a tangible assailant, screamed shots into the night. But the green beam struck the ships and forts and instantly silenced them.

Now the realization of this tangible enemy spread very far. Within a few minutes, planes and radio communication had carried the news. From distant points which the light could not or did not reach, long-range guns were firing at the Empire State. A moment or

two only. The base of the building was struck.

Then, frantically, observing planes sent out the warning to stop firing. The green beam had for a minute or two vanished. But now it flashed on again. What was this? The spectral wraiths of ten thousand of the enemy were staring. The observers in the planes stared and gasped. What fantasy! What new weird sight was this, stranger than all that had preceded it!

CHAPTER XII

On the Tower Balcony

UPON the little observatory balcony at the top of the Empire State some twelve hundred feet above the stricken city, Don and I were with Tako as he erected the giant projector. In the midst of the silent shadowy outline of the stricken city falling around us, we had carried the projector up the mountain slope. The spectre of the Empire State Building was presently around us; we were in a hallway of one of the upper stories. Slowly, we materialized with our burden. I recall, as the dark empty corridor of the office building came to solidity around me, with what surprise I heard for the first time the muffled reverberations from the crumbling city. . . .

We climbed the dark and empty stairs, upward into the mooring mast. Don and I toiled with the box, under the weapons of our two guards.

It was only a few minutes while Tako assembled and mounted the weapon. It stood a trifle higher than the parapet top. It rolled freely upon a little carriage mounted with wheels. Don and I peered at it. We hovered close to Tako with only one thought in our minds, Jane's murmured words —if we could learn something about this projector. . . .

THEN the horror dulled us. We obeyed orders mechanically, as though all of it were a terrible dream, with only a vague undercurrent of reiterated thought: some chance must come—some fated little chance coming our way.

I recall, during those last terrible minutes when Tako flung the projector beam to send all his distant enemies hurtling into annihilation, that I stood in a daze by the parapet. Don had ceased to look. Tako was rolling the projector from one point to another around the circular balcony. Sometimes he was out of sight on the other side, with the observatory room in the mast hiding him.

We had been ordered not to move. The two guards stood with hand weapons turned on so that the faint green beams slanted downward by their feet, instantly ready, either for Don or me.

And I clung to the balcony rail, staring down at the broken city. It lay strewn and flattened as though, not ten minutes, but ten thousand years of time had crumbled it into ruins.

Then shots from the distant warships began screaming at us. With a grim smile, Tako silenced them. There was a momentary lull.

And then came our chance! Fate, bringing just one unforeseen little thing to link the chain, to turn the undercurrent of existing circumstances—and to give us our chance. Or perhaps Jane, guided by fate, created the opportunity. She does not know. She too was dazed, numb —but there was within her also the memory of what Tolla had almost said. And Tolla's frenzy of jealousy. . . .

TAKO appeared from around the balcony, rolling the projector. Its beam was off. He flung a glance of warning at the two guards to watch us. He left the projector,

flushed, triumphant, all his senses perhaps reeling with the realization of what he had done. He saw the two girls huddled in the moonlight of the balcony floor. He stooped and pushed Tolla roughly away.

"Jane! Jane, did you see it? My triumph! Tako, master of everything! Even of you—is it not so?"

Did some instinct impel her not to repulse him? Some intuition giving her strength to flash him a single alluring moonlit glance?

But suddenly he had enwrapped her in his arms. Kissing her, murmuring love and lust. . . .

This was our chance. But we did not know it then. A very chaos of diverse action so suddenly was precipitated upon this balcony!

Don and I cried out and heedlessly leaped forward. The tiny beams of the guards swung up. But they did not reach us, for the guards themselves were stricken into horror. The shot from a far-distant warship screamed past. But that went almost unheeded. Tako had shouted, and the guards impulsively turned so that their beams missed Don and me.

Tolla had flung herself upon Tako and Jane. Screaming, she tore at them and all in an instant rose to her feet. Tako's cylinder, which she had snatched, was in her hand. She flashed it on as Don and I reached her.

THE guards for that instant could not fire for we were all intermingled. Don stumbled in his rush and fell upon Tako and Jane, and in a moment rose as the giant Tako lifted him and tried to cast him off.

My rush flung me against Tolla. She was babbling, mouthing frenzied laughs of hysteria. Her beam pointed downward, but as she reeled from the impact of my rush, the beam swung up; missed me, narrowly missed the swaying bodies of Tako and Don, and struck one of the guards who was standing, undecided what to do. It clung to him for a second or two, and then swung to the other guard.

The guards in a puff of spectral light were gone. Tolla stood wavering; then swung her light toward Tako and Don. But I was upon her.

"Tolla! Good God—"

"Get back from me! Back, I tell you."

I heard Jane's agonized warning from the floor. "Bob!"

Tolla's light missed my shoulder. Tako had cast Don off and stood alone as he turned toward us. Then Tolla's light-beam swung on him. I heard her eery maddened laugh as it struck him.

A wraith of Tako was there, stricken as though numbed by surprise. . . . Then nothingness. . . .

Shots from the distant warships were screaming around us. One struck the base of the building.

I clung to my scattering senses. I gripped Tolla.

"That projector—what was it you almost told Jane?"

SHE stood stupidly babbling. "Told Jane? That projector—"

She laughed wildly, and like a tigress, cast me off. "Fools of men! Tako—the fool!"

She swung into a frenzy of her own language. And then back into English. "I will show you—Tako, the fool! All those fools out there under the ground and in the sky. I will show them!"

She stooped over the projector and fumbled with the mechanism.

Don gasped, "Those apparitions—is that what you're going to attack?"

"Yes—attack them!"

The beam flashed on. But it was a different beam now. Fainter, more tenuous; the hum from it was different.

It leaped into the ground. It was

a spreading beam this time. It bathed the white apparitions who were peering up at the city.

Why, what was this? Weird, fantastic sight! There was a moment of Tolla's frenzied madness; then she staggered away from the projector. But Don and I had caught the secret. We took her place. We carried it on.

We were hardly aware that the far-off warships had ceased firing. We hardly realized that Tolla had rushed for the parapet; climbed, screaming and laughing—and that Jane tried to stop her.

"Oh, Tolla, don't—"

But Tolla toppled and fell. . . . Her body was almost not recognized when it was later found down in the ruins.

Don and I flung this new beam into the night. We rolled the projector around the platform, hurling the beam in every direction at the white apparitions. . . .

IT had caught first that group which lurked in the ground near the base of the Empire State. Tolla had turned the beam to the reverse co-ordinates from those Tako used. It penetrated into the borderland, reached the apparitions and forcibly materialized them! A second or two it clung to that group of white men's shapes in the ground. They grew solid; ponderable. But the space they now claimed was not empty! Solid rock was here, yielding no space to anything! Like the little materialization bombs, this was nature outraged. The ground and the solid rock heaved up, broken and torn, invisibly permeated and strewn with the infinitesimal atomic particles of what a moment before had been the bodies of living men.

We caught with the beam that marching line of apparitions beneath the ground surface—a section of Tako's army which was advancing upon Westchester. The city streets over them surged upward. And some we caught under the rivers and within the waters of the bay, and the waters heaved and lashed into turmoil.

Then we turned the beam into the air. The apparitions lost contact with their invisible mountain peaks. And with sudden solidity, the gravity of our world pulled at them. They fell. Solid men's bodies, falling with the moonlight on them. Dark blobs turning end over end; plunging into the rivers and the harbor with little splashes of white to mark their fall; and yet others whirling down, crashing into the wreckage of masonry, into the pall of smoke and the lurid yellow flames of the burning city.

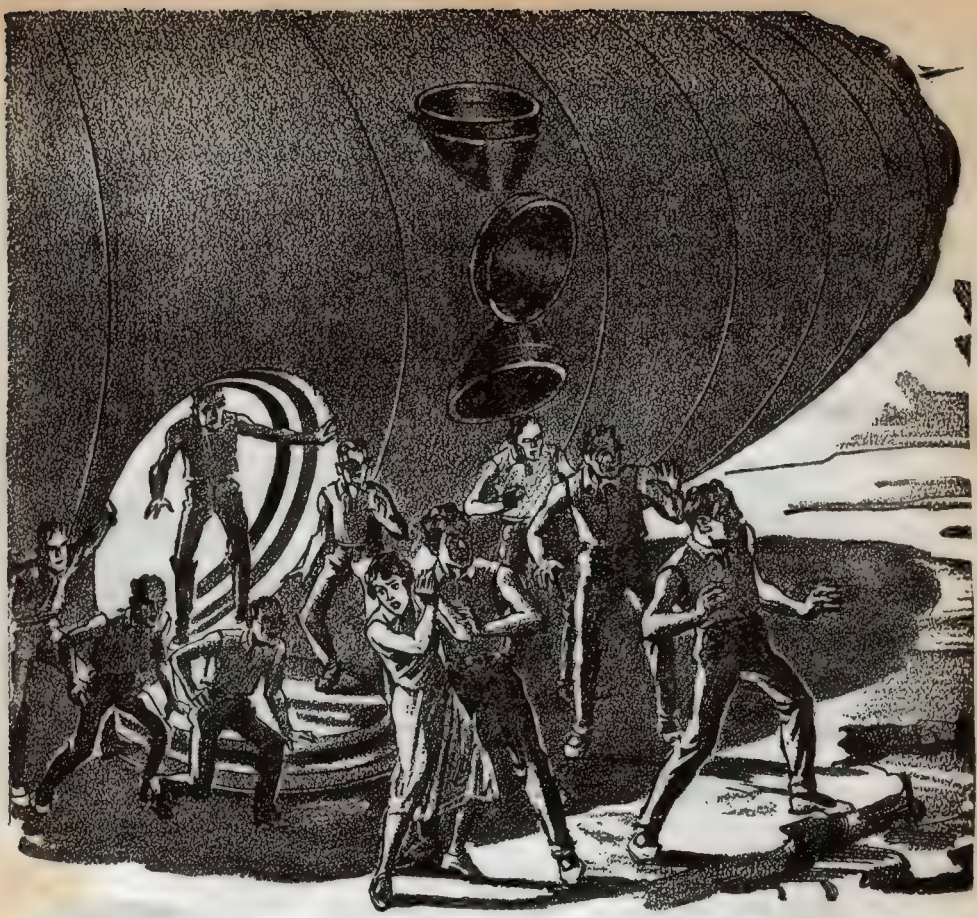
The attack of the White Invaders was over.

A YEAR has passed. There has been no further menace; perhaps there never will be. And again, the invisible realm of which Don, Jane and I were vouchsafed so strange a glimpse, lies across a void impenetrable. Earth scientists have the projector, with its current batteries apparently almost exhausted. And they have the transition mechanism which we three were wearing. But of those, the vital element had been removed by Tako—and was gone with him. Many others were found on the bodies, and upon the body of poor Tolla. But all were wrecked by their fall.

Perhaps it is just as well. Yet, often I ponder on that other realm. What strange customs and science and civilization I glimpsed.

Out of such thoughts one always looms upon me: a contemplation of the vastness of things to be known.

And the kindred thought: what a very small part of it we really understand!



Giants on the Earth

Beginning a Two-Part Novel

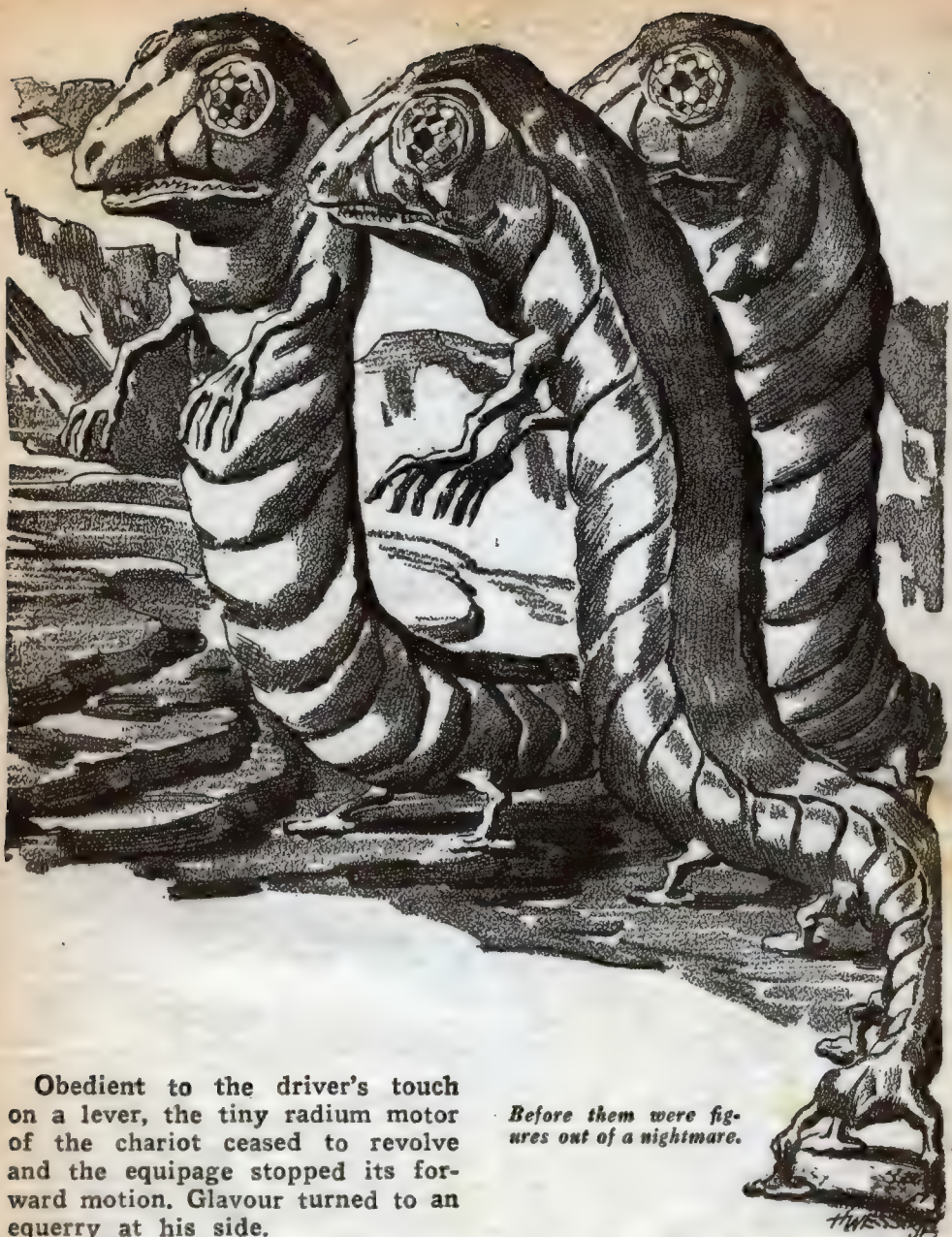
By Capt. S. P. Meek

CHAPTER I

The Jovian Tyrant

GLAVOUR, Jovian Viceroy of the Earth, looked arrogantly about as he lay at ease on the cushions of the ornate chariot which bore him through the streets of his capital city. Like all the Jovians, he was cast in a heroic mold compared to his Earth-born subjects. Even for a Jovian, Glavour was large. He measured a good eight feet from the soles of his huge splayed feet to the crown of his enormous head, crested with stiff black hair which even the best efforts of Tonsome, the court barber, failed to make lie in order. His keen black eyes glittered as they swept over the scene before him. Where only a few years before had been only tangled tropical jungle on the narrow neck of land separating the two great oceans, now rose row after row of stately buildings. Suddenly Glavour's attention was attracted by a girlish form in a passing chariot. "Stop!" he cried.

The yoke of Jovian oppression rests heavily on the dwellers of Earth—until Damis, the Nepthalim, comes forward to lead them in spirited revolt.



Before them were figures out of a nightmare.

Obedient to the driver's touch on a lever, the tiny radium motor of the chariot ceased to revolve and the equipage stopped its forward motion. Glavour turned to an equerry at his side.

"Havenner," he exclaimed, "did you note that maiden who passed us?"

"I did, Your Excellency."

"Bring her before me."

The equerry sprang lightly to the ground and called out in a stentorian voice. At the sound every vehicle on the street ceased its movement until the will of the Viceroy, the ruler of the Sons of God, should be made known. In a few steps, his powerful Jovian muscles carrying his huge body forward at a rate impossible to persons born of Earthly parentage who had not inherited the power needed to overcome the enormous gravity of Jupiter, Havenner reached the equipage containing the girl. He gave a curt order and the girl's driver turned his vehicle and brought it alongside the Viceroy's.

GLAVOUR'S eyes rested on the slim lithesome figure of the Earth-girl. She was just emerging from the grace of girlhood into the full dignity of young womanhood and the soft clinging garb she wore accentuated rather than concealed the curves of her body. As Glavour's gaze fell on her, she cast down her eyes and a flush crept slowly over her pretty face to the mass of coppery gold hair which crowned her head. An expression of brutal lust came into the Viceroy's eyes.

"Daughter of Man," he said slowly, "how are you named and what is your family?"

"My name is Lura, Your Excellency," she faltered, "and I am the daughter of Turgan, the Kildare of this province."

"You please me, girl," said the Viceroy. "Dismiss your chariot and join me in mine. There is room in my seraglio for you."

Lura stared with horror at the huge Jovian and shrank back from his sensual gaze. Glavour gazed at her in astonishment and a deep scowl spread over his face.

"The prospect does not seem to please you, Daughter of Man," he said slowly. "Perhaps the company of the Viceroy of Tubain, Ruler of the Universe, is too lowly to please you and you desire more exalted company. Be careful that I do not have you stripped and given to the palace guards for their sport. Join me in my chariot."

He half rose and leaned forward to clasp her. Lura gave a cry of horror and sprang from her chariot to the ground on the side farthest from the vehicle of the Viceroy. Glavour leaped to his feet with a roar of rage and lunged after her. Before he had left his chariot, the hand of his equerry fell restrainingly on his shoulder. The Viceroy turned a rage-maddened face toward his minion.

"Seize that maiden, Havenner!" he cried. "As I live, she shall be sacrificed at the next games."

THE equerry made no move to obey his superior's orders and Glavour's face grew purple with rage.

"Obey my orders or you shall join her as a sacrifice!" he roared.

The equerry's face paled slightly and grew grim at the Viceroy's words but no trace of fear appeared on his heavy countenance.

"Save your breath, Glavour," he said shortly, but in so quiet a voice that no one but the Viceroy heard him. "You may be head of the Sons of God on this planet but your power does not extend to life and death over me, who am of the same blood that you are. I have the right to appeal to Tubian from such a sentence. Before you strive to haul that girl away to your already crowded seraglio against her will, listen to me. Do you realize who she is?"

The Viceroy's face was a study. For a moment rage predominated and he raised a mighty fist to strike Havenner down, but the equerry looked him fearlessly in the eye. Slowly the hot rage faded and a deadly ferocity took its place.

"You try me far, Havenner," he said in a quiet voice, yet with a hint of steel in his tones, "yet your loyalty is above suspicion. Heard you not the girl say she was the daughter of the Kildare of this province?"

"I heard, Your Excellency," replied the equerry, "but beyond that, she is someone else. She is the affianced bride of Damis, the son of Hortan, who was Viceroy before you."

"A Nepthalim!" exclaimed the Viceroy scornfully. "What matters that? Are the desires of a half-breed bastard to stand above the

wishes of the ruler of the planet?"

"It is true that the mother of Damis was a Daughter of Man," said the equerry quietly, "yet Hortan married her in honor. Damis is a man of great influence and it would be well to reflect before you rob him of his chosen bride. There is wide discontent with our rule which needs only a leader to flare up. Remember that we are few and Jupiter is far away."

"Havenner, you talk like a frightened woman," sneered the Viceroy. "Let him join the ranks of the malcontents. For my part, I hope they revolt. They need to be taught a lesson. Stand aside while I seize the maiden."

THE equerry stood aside with a shrug of his shoulders and the Viceroy sprang to the ground. The girl had run as rapidly as her clinging robes would allow toward one of the beautiful buildings which lined the thoroughfare. She had almost reached the doorway before Glavour reached the ground and raced after her. His Jovian muscles carried his body forward at a pace which no Terrestrial could equal. It was evident to the watchers that he would seize Lura before she could reach the sanctuary she sought.

A mingled chorus of cries of rage and hisses came from the Earthmen who witnessed the scene. The Jovian guards strove to suppress the outcries until a word from Havenner made them cease their efforts and close in around the Viceregal chariot. The cries rose to a tumult but as yet none of the Earthmen dared to raise a hand against the person of the representative of Tubain, the far-off Jovian whom they had been forced to acknowledge as God, and whom many of the ignorant believed *was* God.

The Viceroy rapidly overtook his victim and his hand was outstretched to grasp her when there came an interruption. From the doorway which the girl had been striving to reach, a man burst forth and leaped between her and her pursuer. Glavour stopped and glowered at the new obstacle in the path of his sensuality.

The newcomer stood five inches over six feet in his flat sandals but it was only in his unusual height and his enormous strength that he showed the blood of his Jovian father. His feet were small and shapely with a high-arched instep and his whole form was graceful and symmetrical. Crisply curling yellow hair surmounted a head which Praxiteles would have reveled in as a model for his youthful Hermes. As he faced the Viceroy, his usual pleasant smile was gone and his face was set in grim lines, his clear blue eyes as cold as the ice brought from the polar regions to cool the Viceroy's drink.

THE two stood and stared at one another, the black eyes of the Jovian burning like fire in strange contrast to the cold glare of the blue ones. Then tension in the street grew taut. The Earthmen gradually closed in about them. At a word from Havenner, the Jovian guards closed up and drew from their garments long black tubes. Presently Glavour broke the silence.

"Make way, son of Hortan, for the Viceroy of God," he rumbled in his deep-toned voice.

Damis made no reply, nor did he move a muscle. The rage deepened on the Viceroy's face and he strode forward, his hand raised to strike down this puny assailant who had interposed his slight form between the massive limbs of the Jovian and the object of his desires. With a cry of rage he brought down his huge hand and

then Damis moved. So swiftly that the eye could hardly follow his movements, he leaped to one side and his own hand shot up. Fingers of steel circled the hairy wrist of the Viceroy and stopped his hand in mid-air. For a moment Glavour was too astonished at the idea of physical resistance to move. Damis, with an almost contemptuous air, tossed aside the hand he held and made as if to turn his back. With an inarticulate roar of rage, the Jovian charged.

Again Damis sprang to one side and his hand moved. In a long arc his clenched fist shot up and caught Glavour on the chin and rocked the four hundred pounds of bone and muscle that made up the Viceroy. For a moment Glavour staggered and then his hand fell on Damis' shoulder. Exerting all of his huge strength, he pulled his opponent toward him and threw his massive arms about him. Damis made no attempt to wriggle out of the bone-crushing grip, but, instead, threw his arms about the Jovian and matched muscle against muscle. The Jovian guards, who had witnessed the feats of strength which were the Viceroy's boast, expected only one outcome, but to Havenner, who recalled that Hortan, the father of Damis, had been one of the mightiest men of Jupiter, the issue was not a foregone conclusion. Stealthily as a cat he crept forward, a long black tube clenched in his hand.

MIGHTILY the two strove. The face of the Jovian grew dark red and then almost purple as he put forth his last ounce of strength to crush the opponent whom he topped a good eighteen inches. For all of his effort, not an inch did Damis yield. His face grew as pale as the Jovian's grew red and his breath came whistling through his lips, but the strength he had inherited from his mighty sire stood him in good stead. Inch by inch he bent the huge form of his opponent backward. With a sudden effort, the Jovian raised one of his huge misshapen feet and strove to bring his mighty thighs to aid him in thrusting away his enemy. Damis' knee came up and the Jovian dropped his foot with a howl of pain. His breath came in gasps and he stared into the implacable blue eyes before him with a sudden spasm of fear. At last Glavour had met his match.

He opened his lips to call to his guards for help but shame held back the cry. Once he admitted defeat, the fear in which the Earthmen held him would be shaken. With an effort he bent forward his head and buried his huge fangs in Damis' shoulder. There was a cry from the watching Earthmen as they surged forward. The Jovian guards ran to their ruler's assistance but they were too far away. Havenner was close and he sprang forward, thrusting the black tube which he carried, toward Damis.

A cry advised Damis of his danger. With a herculean effort he lifted the huge Jovian from his feet and swung him around until the massive body was between him and the threatening weapon of the equerry. As swiftly as striking snakes his arms uncoiled from around Glavour's body and grasped him by the shoulders. With one mighty heave he tore the Jovian's mouth from his shoulder although the flesh was torn and lacerated by the action. One arm went under Glavour's arm and back around until the hand rested on the back of his neck. The other arm caught the Viceroy's arm and twisted it behind his back. Glavour gave a cry of pain as the punishing hold was applied. Holding his

captive before him, Damis turned to the equerry.

"Put up your tube," he said. "One hostile move and your ruler dies."

"Disintegrate him, Havenner!" gasped the Viceroy.

THE equerry hesitated a moment but aid was at hand. The Jovian guards had come up to the scene of the struggle and surrounded the pair, black tubes in their hands. The sight of reinforcements roused the Viceroy's lagging courage.

"Capture him alive!" he gasped. "He will be sacrificed at the next games!"

With a roar the guards closed in on the struggling pair. As hairy hands grasped his shoulders, Damis lunged back with all his strength. There was the crack of a breaking bone and the Viceroy's arm hung dangling and useless. Damis whirled on the guards, shaking himself loose for a moment from their grasp, and his fists flew out. Two of the giants went down before well-aimed blows but no one man, no matter what his might, could fight against a score of the huge Jovians and Damis was borne to the ground. Even as he fell, a roar went up from the watching Terrestrials and with one accord they closed in to attack.

The Jovian guards who were nearest whirled about and raised the black tubes threateningly. For a moment the Earthmen hesitated and then came on with a rush. From the tubes came rays of intensely violet light. As they fell on the front ranks of the charging Terrestrials, the form, on which the rays impinged grew suddenly tenuous. The sunlight penetrated through the bodies for a moment and then there was nothing but a group of dancing motes of light to mark where they had stood.

UNDAUNTED by the fate of their leaders, the balance of the mob surged forward uttering cries of hate and rage. From all the doorways, fresh hordes of Earthmen came rushing to join the fray. Again and again the terrible rays of the Jovian guards blasted scores of their assailants into nothingness but more came. Presently the tubes of the Jovians began to lose their power and the violet light became lighter in shade. With a roar the Earthmen swept forward and the huge guards went down under the onrushing waves of humanity. Half a dozen of them were dragged down and hurled back into the milling crowd where they were torn limb from limb. The balance of the guards, guided by Havenner's stentorian shouts, closed in around Glavour and the prisoner and battered their way by sheer brute force toward the Viceregal chariot. They had reached in and climbed in when a feminine shout pierced the din of conflict.

"Damis! They have Damis prisoner! Rescue him!"

With a roar, the mob charged again. Mightily the Jovians strove but they were outnumbered by hundreds to one. One after another was torn from the chariot until Damis freed himself by a mighty effort and leaped to the ground. As he did so, the driver's hand found the controlling lever and the chariot shot forward, crushing under its wheels several luckless Earthmen who stood in its path. A roar of triumph rose from the crowd and Damis was hastily lifted to their shoulders. He looked down on his rescuers with an anguished face.

"Lura!" he gasped. "Is she safe?"

One of the Terrestrials shouted something unintelligible and pointed up. Damis' gaze followed the direction in which he pointed. From an upper window of the building

into which she had fled, Lura's face, wreathed with smiles, looked down on him. He smiled and waved in triumph to her. There was a stir on the outskirts of the crowd and an elderly man, tall for an Earthman and with dignity and authority written large on his countenance, made his way through the crowd. At a word from him, Damis was lowered to his feet to face the newcomer.

"Damis," said the elderly man, "I never thought to grasp the hand of a Nepthalim or of anyone with Jovian blood in his veins in friendship, yet I can do no less than offer my hand. It is the thanks of a father to the saviour of his daughter."

DAMIS met the outstretched hand with a grip that made the elderly man wince.

"It is an honor and a pleasure to grasp in friendship the hand of Turgan, the Kildare of this province," he said, "the hand of one who was born to be ruler in fact, instead of an underling under a Jovian master."

"It is true that my father was king of this country before the Jovians came, forty years ago," said Turgan gravely, "yet now there is no honor or merit in it. Even the rank of Kildare, which is but that of a slave ruling other more unfortunate slaves, could not have prevented my only daughter from being dragged away to the seraglio of that monster. To such a pass has one been brought whose birth made him the peer of any. But now we must plan and plan swiftly, else are we undone. Glavour will return with his minions. Safety will be found only in flight, for mere numbers cannot oppose the weapons they will turn against us. Damis, so far you have been one with our Jovian masters, as have all of the Nepthalim. Now it is war to the death between them and us. On which side do you stand?"

Damis hesitated as the Kildare's keen gray eyes bored into his own.

"My father was Viceroy of the Earth in the days gone by," he said slowly, "and he planned that I should take his place. His dream was a peaceful union of the strength and science of Jupiter with the beauty and humanity of the Earth. True to his dream, I have cleaved to his people and striven to bring it about, but I can see now the folly of his ambition. In stature and mental power he was a Jovian, in all else he was a Terrestrial. Since his death I have seen you stripped bit by bit of what he left you until now you are lower than the slaves on Jupiter, who can appeal to Tubain against a cruel master. Even I, a Nepthalim, the son of a Viceroy, am forced to revolt to save the maiden I love. Henceforth, I give up my father's dream of peace and do what my heart tells me is right. It is war to the death between the Sons of God and the Sons of Man, and I, who am descended from a Son of God and a Daughter of Man, cleave to my mother's people."

A SHOUT of joy came from all who heard his ringing voice announce his new allegiance. Damis had ever a reputation as a humane man and he was guilty of none of the brutalities which made the Jovians so detested and which were bettered by those of the Nepthalim who had the power. It was only the influence which Damis had wielded with the Earthmen which had prevented many an outbreak which would have been ruthlessly crushed by the Jovian overlords. To know that the son of a Viceroy, reputed one of the most brilliant as well as one of the strongest of Jovian blood, was one with them,

made them hope that they might make some headway against their oppressors and wring from them some small measure of liberty. Turgan's face was wreathed with smiles.

"Again I offer you my hand, Damis," he said. "Before it was as a father thanking you for the rescue of his daughter. Now it is a father welcoming the son he has always longed for and whom he feared he would never have. My consent to your union with Lura which was grudgingly given only to save her from the dishonor of being dragged a slave to Glavour's seraglio, is withdrawn, and in its place I give you a happy father's joyous consent to the marriage."

There were tears in the old Kildare's eyes as he grasped the hand of the young blond giant. For a moment they stood with clasped hands, two strong men taking the measure of one another and each found the other good. The Kildare dropped Damis' hand and turned to the crowd.

"To your homes!" he cried sharply. "The Sons of God will return with new weapons and it is my wish that none be found to oppose them. All within sound of my voice who are members of the inner council will join me in the palace. Damis, come with me."

Followed by Damis and a score of Earthmen, the Kildare led the way into a building. As they entered, Damis cast a swift glance around and looked questioningly at Turgan.

"Lura—?" he asked hesitantly.

"Will join us in the council room," said Turgan with a smile.

CHAPTER II

Turgan's Plan

CONTENT with the Kildare's answer, Damis followed him down a corridor and into a large room set around with benches. The Kildare did not pause but moved to the far end of the room and manipulated a hidden switch. A portion of the paneled wall swung inward and through the doorway thus opened, Turgan led the way. The corridor in which they found themselves was dimly lighted by radium bulbs which Damis shrewdly suspected had been stolen from the palace of the Viceroy by Earthmen employed there. It sloped steeply downward and Damis estimated that they were fifty feet below the level of the ground before another door opened to Turgan's manipulation of hidden catches and admitted them to a large room equipped with tables and chairs and well lighted by other radium bulbs. Damis turned to the Kildare.

"For years there have been rumors among the Sons of God of the existence of this place," he exclaimed, "yet every effort to find it has been futile. Glavour and his council have at last decided that it is merely a myth and that the underground council chamber does not exist. You have kept your secret well, for never has a breath of suspicion reached him that Turgan was one of the conspirators who plotted to overthrow the reign of the Sons of God."

"Let that, Damis, be a sample of the earnestness and loyalty of your new brethren," said the Kildare. "There are hundreds of Earthmen who know where this place is and what secrets it holds, yet none has ever betrayed it. Scores have gone to torture and to the sacrifice of the games without unsealing their lips. Would a Jovian have done likewise?"

"To give them due credit, I think they would have," replied Damis thoughtfully, "yet their motive would not have been loyalty, but stubbornness and a refusal to

subordinate their will to another's. I thought you said that Lura would join us here?"

AS Damis spoke a door on the far side of the chamber opened and a half dozen women entered. Lura was among them and with a cry of joy, she ran lightly forward and threw herself into Damis' outstretched arms. Turgan smiled paternally at them for a moment and then touched his daughter lightly on the shoulder.

"I have freely and gladly given my blessing to your union with Damis," he said. "He is now one with us. His presence makes victory possible and enables us to act at once instead of planning for years. Damis, you can operate a space flyer, can you not?"

"Certainly. That is knowledge which all Nepthalim possess."

A suppressed cheer greeted his words and the Earthmen crowded around him, vibrant with excitement.

"The time is at hand!" cried a stern-faced man in the crimson robe which marked him an Akildare, an under-officer of the Earthmen.

"Before I can operate a space flyer, I will have to have one to operate," objected Damis.

"That will be supplied," cried a dozen voices. Turgan's voice rose above the hubbub of sound.

"Let us proceed in orderly fashion," he cried.

THE noise died down to silence and at a gesture from their ruler, the Earthmen took seats. Turgan stood beside Damis.

"For the enlightenment of our new-found brother, I will recite what has happened and what we have done, although most of you know it and many of you have done your part in bringing it about.

"Forty years ago, the Earth was prosperous, peopled with free men, and happy. While we knew little of science and lived in mere huts, yet we worshipped beauty and Him who ruled all and loved his children. It was to such a world that the Jovians came.

"When the first space flyer with a load of these inhuman monsters arrived on the earth, we foolishly took them for the angels whom we had been taught to believe spent eternity in glorifying Him. We welcomed them with our best and humbly obeyed when they spoke. This illusion was fostered by the name the Jovians gave themselves, the 'Sons of God.' Hortan, their leader and the father of our new brother, was a just and kindly man and he ruled the earth wisely and well. We learned from them and they learned from us. That was the golden age. And the Sons of God saw that the Daughters of Man were fair, and they took of them wives, such as they chose. And sons were born to them, the Nepthalim, the mighty men of the Earth.

"In time other flyers came from the heavens above and brought more of the Sons of God to rule over us. Then Hortan, the Viceroy, died, and Damis, know you how he died? You were a babe at the time and you know nothing. Your father and your mother, who was my distant kinswoman, died under the knives of assassins. It was given out that they had gone to Jupiter, yet there were some who knew the truth. You, the killers sought, but one of the Earthmen whose heart bled for your dead mother, spirited you away. When you had grown to boyhood, he announced your name and lineage, although his life paid for his indiscretion. The same hand which struck down your father and your mother struck at him and struck not unavailingly. You, since all knew your name and

lineage, he dared not strike, lest those who love him not, would appeal to Tubain. Know you the name of the monster, the traitor to his ruler and the murderer of your parents?"

DAMIS' face had paled during the recital and when the old Kildare turned to him, he silently shook his head.

"It was the monster who now rules over us as Viceroy and who profanes the name of God by conferring it on his master and who would, if he dared, assume the name for himself. It was Glavour, Viceroy of the Earth."

The blood surged back into Damis' face and he raised a hand in a dramatic gesture.

"Now I vow that I will never rest until he lies low in death and this be the hand that brings him there!"

A murmur of applause greeted Damis' announcement and Turgan went on with his tale.

"With the kind and just Hortan dead, Glavour assumed the throne of power, for none dared oppose him. Once secure, he gave way to every brutal lust and vice. Your mother was Hortan's only wife and he honored her as such, and meant that the Nepthalim should in time rule the Earth, but Glavour had no such ideas. To him, the Daughters of Man were playthings to satisfy his brutal lusts. By dozens and by scores he swept the fairest of them into his seraglio, heeding not the bonds of matrimony nor the wishes of his victims. Only the fact that my daughter has been kept from his sight until today has spared her.

"The Earthmen who had been content to live under Hortan's rule, rebelled against Glavour but the rebellion was crushed in blood. Time and again they rose, but each time the mighty weapons of the Jovians stamped out resistance. At last we realized that craft and not force must win the battle. This chamber had been built when Hortan erected his new capital and none of the Jovians knew of its location, so it was chosen as our meeting place. To-day, Damis, I have twenty thousand men sworn to do my bidding and to rise when I give the word. Many thousands more will rise when they see others in arms and know that again the Sons of Man stand in arms against the Sons of God."

"THERE are less than a thousand Jovians and perhaps twice that number of Nepthalim on the Earth, yet that handful would stand victorious against all the Earthmen living," said Damis thoughtfully. "Even I, and I am a Nepthalim, do not know the secret weapons in the arsenal of Glavour, but I know that they are more powerful than anything we have ever seen. Forget not, too, that a radio message to Jupiter will bring down ships with hundreds, nay, thousands, of her fighting men with weapons to overwhelm all opposition."

"Such was the case but it is so no longer since we number you among us," replied the Kildare. "Earthmen are employed in the communications net which the Jovians have thrown around the Earth and it is but a step from those machines to the huge one with which they talk to their mother planet. My spies have been busy for years and our plans are all laid. There is one planet which all the forces of Jupiter have never been able to conquer; from which their ships have ever retreated in defeat."

"Mars!" exclaimed Damis.

"Exactly," replied Turgan. "The Martians are a peaceful and justice-loving people, yet they know

that peace is given only to those who are ready and able to fight for it. Ages ago they perfected weapons before which the Jovians fly, if they are not destroyed. I have communicated with the Grand Mognac of Mars and laid our plight before him. He has pledged his aid and has promised us enough of his weapons to not only destroy the Jovians and the Nepthalim on the Earth, but also to prevent other Jovian ships from ever landing. The only problem has been how to get them here. The Martians, not desiring conquest and content with their own planet, have never perfected space flyers. They have promised us the weapons, but we must go to Mars and bring them here. Enough can be transported on one of the Jovian ships."

"How will we get a ship?" asked Damis.

"That also has been solved. There are two Jovian ships kept on the Earth, ready for instant flight to Jupiter. They are loosely guarded for the Sons of God believe that we have no idea of how to operate them. We can capture one of them whenever we desire, but so far such action would have been useless. Little by little we have gathered bits of information about the flyers, but we had expected to wait for years before our venture would have a chance of success. We dared not try prematurely, for one attempt will be all that we will ever get. Now we are ready to strike. You can fly the ship to Mars and back and with the Martian weapons, we can sweep the Jovians from the Earth."

DAMIS' eyes lighted as Turgan spoke.

"Your plans are good," he cried, "and I will fly the ship for you. In return I ask but one thing: let mine be the hand which strikes Glavour down."

"If it can be so done, yours shall be the hand, oh Nepthalim!" cried the Akildare who had first spoken of the ship. Turgan bowed his head and a murmur of assent came from the assembled council.

"And now for action!" cried Turgan. "There is no need to talk longer. Years ago our plans were perfected for the capture of the space ship and each knows the part assigned to him. Toness, the Akildare, will rule during my absence, for I will command the ship, under Damis. Twelve of our men who know all that we have been able to learn will make up the crew. None of them will take any part in the capture of the ship for many lives may be lost in that venture and we will need the instructed men to operate the ship after we capture it. Damis, have you any addition to make to our plans?"

"Only one, Turgan. Glavour will ransack the Earth rather than be cheated of one he has marked for his prey. Lura will be safe nowhere on Earth. Her capture by the Sons of God will discourage the timid who will say that if Turgan cannot protect his own daughter, how can he free the Earth? She must go with us."

"Your point is well taken, Damis," replied the Kildare. "She shall go. Now to action! Monaill, are your men ready?"

"They will assemble at my signal, oh, Kildare."

"Give the signal, for nothing will be gained by delay. We will follow behind while you capture the ship."

MONAILL bowed before the Kildare and hastened from the council room. In a few words Turgan gave to Toness the final orders for the conduct of the conspiracy during his absence. Followed by Lura, Damis and three of the council, he made his way

to a hidden doorway. Along an underground passage they made their way for a quarter of a mile. A group of figures was seen dimly ahead of them and nine men joined the party. Turgan identified them to Damis as the balance of the crew.

"Has Monaill passed this way?" he asked.

"He passed with his band a few moments ago, oh, Kildare," replied one of the men. "See, there is the light which summons us to follow."

He pointed to a tiny light which had suddenly flashed into brilliance. Turgan nodded and led the way forward. At another doorway which opened to Turgan's touch on a hidden lever, the party paused. An instant later there came from a few hundred yards ahead of them a hoarse cry of alarm followed by the roar of a huge whistle.

"The battle has joined!" cried Turgan. The others crouched, tense and motionless. From ahead came the sound of battle. Violet light showed in short intense flashes. It was evident that the Jovian guard of the space ship was fighting valiantly to protect it. Shaking aside Turgan's restaining hand, Damis crept slowly forward.

Two hundred yards from the spot where he left Turgan he came to a bend in the passage. The sound of battle came from just ahead. He crept forward and peered around the corner. The passage emerged from the ground and gave way to a huge open space which he recognized as part of the grounds of the Viceregal palace. Standing on a launching platform was a Jovian space ship around which a battle raged.

FIVE of the huge Jovians were battling furiously with a score of Earthmen. Three dead Jovians and a dozen crushed forms of Terrestrials testified to the bitterness of the fight. The terrible black tubes of the Jovians were exhausted and the battle was now being waged hand to hand, Jovian ax against Earthly sword. The Terrestrials were being gradually pressed back.

A shout came from the distance and Damis could see a dozen Jovian guards hastening toward the scene of the fight, brandishing in their hands the terrible black tubes. He turned back and shouted to Turgan.

"Hasten!" he cried. "In a moment, Monaill and his men will be overthrown!"

With a shout the crouching group of Terrestrials rushed toward him, but Damis did not wait. The oncoming Jovians were several hundred yards away when he threw himself into the fray. At his appearance, a cry of dismay went up from the Earthmen which was changed to one of mingled wonder and triumph as Damis seized the nearest Jovian and bore the fellow down despite his struggles. It was a matter of seconds for him to break the bull neck of the huge guard and he turned to grasp another. The four remaining Jovians backed away but Damis was not to be denied. He rushed in and grasped another about the waist, avoiding the swing of the forty-pound ax, and dragged him back. The swords of the Terrestrials pierced the struggling guard from the rear and Damis rushed toward the three survivors.

Heartened by his aid, the remnants of Monaill's band charged with him. Two of the Jovians fell before the swords of the Earthmen and the third went down before a blow of Damis' fist. As he turned back to the ship, Turgan, followed by the crew of the ship, dashed up.

"Into the ship!" cried Damis. A

glance showed that the Jovian guards were less than two hundred yards away and were coming on in huge leaps. The door of the space ship was open and the band of Terrestrials clambered in.

"Quick, Damis!" came Lura's voice.

The Nepthalim turned to enter but his gaze fell on the six survivors of Monaill's band.

"In with you!" he cried sharply.

THE Terrestrials hesitated but Damis grasped the nearest of them by the belt and threw him bodily into the ship. The others hesitated no longer but clambered in. The Jovians were less than fifty yards away and already deep violet flashes began to come from the tubes they carried. Damis stooped and grasped one of the dead Jovians. With an effort possible to only two men on Earth, himself and Glavour, he raised the body above his head and hurled it straight at the oncoming Jovians. His aim was true and three of them were swept from their feet. With a mighty bound, Damis sprang through the door of the space ship and the airlock clanged shut behind him.

The crew of the ship were already in place, awaiting orders. There was no time for instruction and Damis leaped to the control board. He pulled a lever far down and in an instant the entire crew was flat on the floor as though an enormous weight had pressed them down. With a superhuman effort, Damis raised himself enough to cut off the power. The ship shot on through the rapidly thinning air, its sides glowing a dull red. The heat inside the ship was almost intolerable.

As the pressure of the enormous acceleration ceased, the bruised Terrestrials struggled to their feet. Damis turned to another lever and a breath of icy air swept through the ship.

"This will help for an instant," he gasped, "and the cold of space will soon cool us down. I had to give the ship a tremendous start or the tubes of the Sons of God would have reduced us to elemental atoms. Keep away from the walls and don't exert yourselves. I can handle the ship alone for the present."

FOR half an hour the ship charged on through space. Damis presently pulled the control lever down and placed the ship under power. The walls changed from dull red to black and the temperature in the ship grew noticeably lower. Damis made his way to one of the walls and tested it with a moistened finger.

"It's cool enough to touch," he announced. "Fortunately the insulating vacuum between the inner and the outer skins was at its maximum, otherwise we would have been roasted alive. The external wall was almost at the fusing point. We can move around now."

He posted lookouts at the observing instruments with which the ship was equipped and instructed them in their duties and the manipulation of the instruments. He placed one man at the control lever of the stern rocket-motors. As he turned away from the control board he saw Lura standing quietly in a corner. He opened his arms and she ran to them with a cry of joy.

"Oh, Damis, I was so afraid for you," she gasped, "and I wanted to hug you when you jumped in and Father closed the lock behind you but I knew that you had to take care of the ship. Were you hurt at all?"

"Not a bit, darling," he assured her, "but it was touch and go for a moment. I didn't know whether

the guards would dare to disintegrate the ship without orders from Glavour. In any event, the blasts of the stern motors must have hurled them half a mile. No strength could stand the blast of gas to which they were subjected. Are you all right?"

"Perfectly," she replied; "I never was in any danger. I was the first one in the ship and the only chance I had to be hurt was to have you overcome and the ship recaptured. In that case, I had this."

She displayed a small dagger which she drew from the bosom of her robe. Damis shuddered and took the weapon from her.

"Poisoned," he exclaimed as he glanced at its tip. "You had better let me take care of it. You might fall and prick yourself with it."

She surrendered the weapon to him with a smile and Damis placed it in a cabinet built against the wall of the flyer.

"Now go in and lie down," he told her. "I've got to start plotting a course to Mars and teaching my crew how to operate the ship."

"Can't I learn, too?" she objected. "If anything should happen, it might be quite a useful bit of knowledge. Besides, I already understand celestial geography quite well and I may be able to help in the navigation."

Damis looked at her in surprise.

"You a celestial geographer?" he asked in astonishment. "Where did you learn it?"

"From my father. He was a famous heaven-master before the Jovians came and he taught me."

"That's excellent!" cried Damis. "I didn't realize we had so much knowledge at our command. Turgan, will you take charge of the navigating after I plot a course? Lura can assist you. Now, the rest of you attend to my words and I'll teach you how to operate the rocket motors."

THE Jovian ship was built along very simple lines. Batteries of rocket motors at the bow and stern and on each of the sides furnished both motive and steering power. The Terrestrials were all chosen men and in three hours Damis announced himself as satisfied with their ability to operate the ship under any normal conditions. With Turgan and Lura watching and checking his calculations, he plotted a course which would intercept Mars on its orbit.

"Luckily, Mars is approaching us now," he said, "and we won't have a stern chase, which is always a long one. We will be able to reach Mars, spend several days on it and return to Earth before ships can reach the Earth from Jupiter, even if they are already on the way, which is highly probable. I'll turn the ship a little."

Under his direction, the crew turned the ship in its course until it was headed for the point in space where Damis planned to intercept the red planet. With the course set to his satisfaction, he gave orders for the stern motors to be operated at such a power as to give the highest acceleration consistent with comfort for the crew. There were no windows in the ship but two observers seated at instruments kept the entire heavens under constant observation. Damis motioned one of them to stand aside and told Lura to take his place. She sat down before a box in which were set two lenses, eye-distance apart. She looked through the lenses and gave a cry of astonishment. Before her appeared the heavens in miniature with the entire galaxy of stars displayed to her gaze. In the center of the screen was a large disk thickly marked with pocks.

"The moon," explained Damis. "We are headed directly toward it now but we'll shift and go around

it. We'll pass only a few hundred miles from its surface, but unfortunately it will be between us and the sun and you'll be able to see nothing. Look in the other observer."

LURA turned to the second instrument. A large part of the hemisphere was blotted out by the Earth which was still only a few thousand miles away. The sun showed to one side of the Earth, but a movable disk was arranged in the instrument by means of which it could be shut off from the gaze of the observer. Despite the presence of the sun, the stars shone brilliantly in the intense black of space.

"How fast are we traveling?" asked Lura.

"It is impossible to tell exactly," he replied. "I can approximate our speed by a study of the power consumed in our stern motors and again I can approximate it by a series of celestial observations, provided we do not have to change our course while I am doing so."

Isn't there some sort of an instrument which will tell you how fast we are going?" she asked in astonishment.

"Unfortunately not. We are traveling through no medium which is dense enough to register on an instrument. Our course is not straight, but is necessarily an erratic one as we are subject to the gravimetric pull of all of the celestial bodies. Just now the Earth supplies most of the pull on us but as soon as we approach the moon, we will tend to fall on it and frequent sideblasts will be needed to keep us away from it. Once we get up some speed that is comparable with light, we can measure by direct comparison, but our speed is too low for that now."

"I saw you lay out your course, but how are we steering?"

"The observer who works on the front instrument keeps a cross hair on a fixed star. When the curving of the ship deviates us more than five degrees from our course, a side motor is turned on until we straighten out again. It is quite a simple matter and I'll take the ship myself when we near Mars. There is no need to be frightened."

"I'm not frightened," said Lura quickly; "I was just curious. Is there any danger of hitting a wandering body?"

"NOT much in this zone and at this speed. When our speed picks up there will be a slight danger because the higher our rate of speed, the more crowded space becomes. If we were going to Jupiter we would have to use much more caution. The asteroid belt lying between Mars and Jupiter is really crowded with small bodies but comparatively few are in the zone between Earth and Mars. That is one thing I figured on when I said that we would have plenty of time to go to Mars and back before ships could come from Jupiter. Ships from Jupiter would be able to develop a much higher speed than we will attain were it not for the asteroid belt. They will have to travel quite slowly through it, in portions, not over a few thousand miles per minute, while we are not held down that way. Now that we are really started, it will be best to set regular watches. I will assign you as navigator for one watch if you wish."

"I certainly do want to do my share."

"All right, we'll let it go that way. Turgan and I will take the other two watches until we get there."

"How soon will that be?"

"About seventeen days. Mars happens to be only about forty

million miles away just now. Now I'll set the watches and divide the crew."

A short examination showed Damis that his crew were intelligent and that his instruction had been good. Every member knew his duties. Instead of the two twelve-hour watches which were usual on space flyers, the additional members of the crew who had been part of Monaill's band enabled Damis to set only eight-hour shifts. Each member of the crew was taught to operate the offensive ray projectors with which the flyer was equipped.

THINGS soon settled down to routine. No wandering celestial bodies came close enough to cause them any real alarm. Once the novelty of hurtling through space had passed away, the trip became monotonous. The Earth, which had at first filled the field of one of the observers, dwindled until it became merely a brilliant green star. The red speck which was Mars grew constantly more prominent as the hours went by and Damis gave the word to turn on the bow motors and retard the speed of the flyer. Several of the crew had worked in the communications net which Glavour had thrown around the Earth and under orders from Turgan, they began to call the red planet on the ship's communicator.

"It is well to let them know who we are," he said to Damis when he gave the order. "We are flying a Jovian ship and since we have come so far successfully, I have no desire to be blasted out of space by their powerful weapons of defense."

Damis agreed heartily, and for twelve hours continual attempts were made to communicate with their destination. At last their signals were answered. Despite the differences in language, they had no trouble in understanding the messages. A system of communication based not on words or sound forms, but on thought forms, had been introduced to the Earth by the Jovians and both Damis and Turgan were quite familiar with it. The Martians informed them that the approaching ship had been sighted and carefully watched for several days. As soon as he learned who the occupants were, the Grand Mognac of Mars sent a message of welcome and instructed them on what part of the planet to land. He promised that a deputation would meet them with transportation to his capital city where he would welcome them in person and supply them with the weapons they sought.

CHAPTER III

The Doom on Mars

TWO days later Damis dropped the ship gently to the ground in a wide and deep depression which had been designated as their landing place. The Grand Mognac had assured them that the depression held enough atmosphere to enable them to breathe with comfort. There was no one in sight when they landed and after a short consultation, Damis and Turgan entered the airlock. In a few moments they stood on the surface of Mars.

They had landed in a desert without even a trace of the most rudimentary vegetation. Barren slate-colored mountains shut off their view at a distance of a few miles. When they strove to move they found that the conditions which had confronted the Jovians in their first landing on the Earth were duplicated. The lesser gravity of the smaller planet made their strength too great for easy control and the slightest effort sent them

yards into the air. This condition had been anticipated and at a word from Damis, lead weights, made to clamp on the soles of their sandals were passed out from the space ship. Although this enabled them to keep their footing when moving over the dry surface of Mars, the slightest exertion in the thin air caused them acute distress.

"We had better save our strength until the messengers of the Grand Mognac arrive," said Damis at length. "We may have quite a trip before us."

Turgan agreed and they sat down by the side of the ship where its shadow would shield them from the fierce solar rays which beat down on them. The sun looked curiously small, yet its rays penetrated the thin air with a heat and fierceness strange to them. Lura and a half dozen of the crew were passed through the airlock and joined them.

"I am surprised that the Martians have not arrived," said Damis presently. "I am interested to see what their appearance is."

HARDLY had he spoken than the air before them seemed to thicken in a curious fashion. Lura gave a cry of alarm and pressed close to Damis. The sun's rays penetrated with difficulty through a patch of air directly before them. Gradually the mistiness began to assume a nebulous uncertain outline and separated itself into four distinct patches. The thickening air took on a silvery metallic gleam and four metallic cylinders made their appearance. Two of them were about eight feet in height and three feet in diameter. The other two were fully thirty feet in length and about the same diameter. On the top of each one was a projecting cap shaped like a mushroom and from it long tenuous streamers of metal ran the full length of each cylinder. From the ether came a thought wave which registered on the brains of all the Terrestrials.

"The Grand Mognac of Mars sends his greeting and a welcome to the visitors from Earth," the message ran. "Before his envoys make their appearance before you, we wish to warn you to be prepared for a severe shock for their physical appearance is not that of the life with which you are familiar. I would suggest that you turn your heads while we emerge from our transporters."

Obediently the Earthmen turned their gaze toward their ship until another thought wave ordered them to turn. Lura gave a cry of horror and Damis instinctively raised one of the Jovian ray tubes. Before them were huge figures which seemed to have stepped out of a nightmare, so grotesque were their forms.

THE Martians had long slug-like bodies, twenty-five feet in length, from which projected a multiplicity of short legs. The legs on the rear portions of the bodies terminated in sucker-like disks on which they stood on the surface of the planet. The upper part of the body was raised from the ground and the legs terminated in forked appendages like hands. Stiff, coarse hair, brown in color, protruded from between brilliant green scales, edged with crimson. The heads were huge and misshapen and consisted mostly of eyes with a multitude of facets and huge jaws which worked incessantly as though the slugs were continually chewing on something. Nothing that the Earth could show resembled those monstrosities, although it flashed across Damis' mind that a hugely enlarged caricature of an intelligent caterpillar would bear some resemblance to the Martians. Another thought

wave impinged on the consciousness of the Terrestrials.

"Mars is much older than your planet and evolution has gone much farther here than it has on the Earth. At one time there were forms of life similar to yours which ruled this planet, but as air and water became scarce, these forms gave way to others which were better suited to conditions as they existed. I would be pleased to explain further, but the Grand Mognac anxiously awaits his guests. His orders are that two of you shall visit him in his city. The two whom he desires to come are Turgan, the leader of the expedition and Damis, the Nepthalim. Fear nothing, you are among friends."

Damis hesitated and cast a glance at Lura.

"By all means, Damis, do as the Grand Mognac bids you," she exclaimed. "I will stay here with the ship until you return. I am not at all frightened, for the whole crew will be here with me."

DAMIS kissed her and after a word with Turgan, he announced their readiness to proceed. He inquired the direction in which they should travel, but another thought wave interrupted him.

"We have brought transportation for you," it said. "Each of you will enter one of the smaller transporters which were especially prepared for your use. When you enter them, seal them tightly and place your feet in the stirrups you will find in them. Grasp the handles which will be before you firmly in your hands. In an instant you will be dissolved into elemental atoms and carried on a beam of force to the receiving focus where you will again be materialized. There is no danger and no pain. It is our usual means of transportation."

With a final word of farewell to Lura and the crew, Turgan and Damis unfastened and entered the two smaller cylinders. Before the astonished eyes of the Terrestrials the cylinders grew thin and vanished like a puff of smoke dissipating in a wind. Lura turned to Kastner whom Turgan had left in command.

"What were my father's orders?" she asked.

"Merely that we wait here until his return," he replied. "Since we are among friends, there is no need to keep the ray projectors manned and I am anxious to let all of the crew have the experience of setting foot on a new planet."

"I am a little tired," said Lura. "I will return to the ship and rest while you let the crew try their footing on Mars."

She entered the airlock and in a few moments was again inside the ship. At a word from Kastner the balance of the crew passed through the lock and began to amuse themselves by trying to keep their footing on the surface of Mars.

DAMIS and Turgan, having entered the transporters, slipped their feet in place as the Martians had directed. They grasped firmly the handles which projected from the inside of the cylinders. There was a momentary sensation of slight nausea and then a thought wave reached them.

"You have arrived. Unfasten your cylinders and emerge."

They stepped out of the transporters and rubbed their eyes in astonishment. Two of the huge slugs had been amazing, but the effect of half a hundred grouped about them was more than the mind could, for a moment, grasp. They were in a huge room composed apparently of the same silvery material of which the transporters were made. It rose above

them in a huge dome with no signs of windows or openings. It was lighted by a soft glow which seemed to emanate from the material of the dome itself, for it cast no shadows. On a raised platform before them rested one of the huge slugs, a broad band of silvery metal set with flashing coruscating jewels clasped about its body. From the ornament and the exalted position, they judged that they were before the Grand Mognac of Mars. With a muttered word to Turgan to follow him, Damis advanced to the foot of the platform and bowed deeply.

"I thank you for that mark of respect, Nepthalim," came a thought wave from the Grand Mognac, "but such forms are obsolete on Mars. Here all living intelligences are equal. Only the accident of superior mental power is allowed to differentiate between us and this added power brings only added and more arduous duties. You came here to get weapons which will free you from the dominance of the Jovians who rule you, did you not?"

"We did, oh Grand Mognac," replied Damis.

"Your prayers shall be answered if you are found worthy. Relate to me now all that has passed since the Jovians first landed on your planet. If you can form thoughts without speaking, you may save the effort of speech. The air has become so thin on Mars that sound will not carry over large portions of it. As a result, we have no organs of hearing, for they have been atrophied from ages of disuse. We use thought as our only means of communication."

RAPIDLY, Damis marshaled his thoughts in order. Slowly and carefully he pictured in his mind the landing of the Jovians as he had heard it described and then the event leading up to their trip. The Grand Mognac frequently interrupted him and caused him to amplify in detail some of the mental pictures and at times turned to Turgan and requested him to picture the same events. When Damis had finished the Grand Mognac was motionless for ten minutes.

"Pardon me for sealing my thoughts from you," he said at length, "but my consultation with my councillors was not a matter for those from another planet to know, no matter how friendly they may be. My council have agreed with me that your tale is a true one and has been fairly pictured. We have no interest in the fate of your planet except that we desire to help the form best adapted to bring about the day we all await with anxiety when all of the planets will be united in bonds of love and justice. We believe that the form which developed on the Earth is better adapted to this than the form which developed on Jupiter and we will give you weapons which will enable you to free yourselves and to protect your planet against future invasions. My scientists are now busy preparing for you weapons which we will deliver to your ship. Meanwhile, you are our honored guests. You will be interested in seeing life as it exists here and Attomanis, one of my council, will be your guide and will answer your questions."

The Grand Mognac dropped the upper portion of his body to the dais as a sign that the interview was ended. Damis and Turgan hurriedly tried to form appropriate expressions of gratitude in their minds but a powerful thought wave took possession of their minds.

"Follow me," it said.

ONE of the caterpillars crawled forward and beckoned to them. With a backward glance at the

Grand Mognac who seemed unaware of their existence, Damis and Turgan followed their guide. He led the way to a platform upon which he slowly crawled. In answer to a thought command, Turgan and Damis climbed upon it and in an instant they were skimming at high speed over the ground. The platform came to a stop near the outer edge of the huge dome. They followed their guide from the platform to a box-like contrivance built against the dome. It had lenses similar in appearance to the observers on the Jovian space ship but built on a larger scale. Attomanis removed the lenses from the instrument and substituted two smaller pairs through which he motioned Turgan and Damis to look.

Before them lay a huge plain across which ran a belt of green foliage. The vegetation forms were like nothing the earth could show. There were no true leaves but huge pulpy branches ran up into the air a hundred feet and divided and subdivided until they became no larger around then hairs. At places on the plants were huge crimson, mauve and blue flowers, ten feet across. As they watched a monstrous form flitted into view. It was that of a butterfly, but such a butterfly as they had never imagined.

The spread of the huge wings was fully a hundred feet across and its swollen body was larger by far than the huge slug which stood beside them. The butterfly waved its thirty-foot tentacles and approached one of the blue flowers. A long curled sucker, fifty feet in length, unrolled and was plunged down into the heart of the trumpet-shaped flower. Gradually the blue color faded to mauve and then to a brilliant crimson. The butterfly abandoned it when the change of color was completed and flitted away to another of the blue blooms.

"WHAT manner of thing is that?" demanded Damis.

"That was a member of the council," replied Attomanis. "She was chosen to be one of those to perpetuate our race. Evolution has gone further with us than on your planet but it will show you what in time you may expect.

"Life started with an amoeba on Mars as it did on Earth and the slow process of evolution followed similar lines. At one time forms like yours were the ruling and guiding intelligences of Mars. They were, however, a highly specialized form. As conditions changed, the form changed. The head and chest grew larger as the air grew thinner until the enfeebled trunk and limbs could no longer support their weight. Gradually the form died out and was replaced by others.

"The forms which you call insects on your Earth were more primitive and hardier forms and more readily adaptable. They increased in size and in intelligence until they were ready to supplant all other forms. The last vestiges of the bipeds were carefully nurtured and guarded by our forefathers until the vanishing atmosphere made their survival impossible. The insect form became supreme.

"We multiplied with extreme rapidity and would have overcrowded the planet had we not learned several things. Our present form of life is immature in many ways. For example, we are totally unable to reproduce our kind. That is the function of the next phase. In this form, however, the intelligence reaches its maximum. As a result, all living creatures, except selected ones, have their growth arrested at the larval stage and pass their entire life in this form. Certain ones at long intervals of

time as the population diminishes, are allowed to spin cocoons and hatch out in the form you have witnessed. This form is almost brainless, the securing of nourishment from flowers and reproducing their kind being the limits of their intelligence. The eggs are maturing in the body of the one you saw. Soon she will lay many thousands of them and then, her life mission accomplished, she will die. We will gather these eggs and tend them until they hatch. All defective ones will be destroyed and the balance will be instructed until they are ready to take their place in the community and carry on the work of the planet."

"THAT is extremely interesting," exclaimed Damis. "Will our Earth in time support the same forms of life as does Mars now?"

"I can see no reason why evolution should follow a different path there than it has here," replied Attomanis, "but millions of years will pass before you lose your atmosphere to such an extent as we have. All of our water is gathered at the polar icecaps, from whence we lead it as it melts through underground pipes hundreds of miles to the spot where we desire vegetation to grow. There we deliver it directly to the roots of the plants so there is no waste. Great bands of cultivated areas crisscross the planet where the soil is of unusual fertility. A certain number of plants are allowed to flower and to bear fruit for the sustenance of the reproductive form of life and to replace themselves. The others we devour while they are young and tender."

"Do you always live in these sealed cities?"

"Always. There are hundreds of them scattered over the planet. As you have noticed, they are composed of damazonium, the same substance as is used in making the transporters. The whole city is but a large transporter. When we desire to feed, the city is disintegrated and materialized over a patch of vegetation which we eat. When the supply is for a time exhausted, the city is moved. This is one way in which we conserve the small supply of atmosphere which is left."

Attomanis suddenly paused and held up one hand for silence. In a moment the thought waves again beat in on the consciousness of Damis and Turgan.

"The weapons which were promised you are ready," he said. "We will return to the throne of the Grand Mognac and you will receive instructions in their use."

HE again mounted the platform and Damis and Turgan took their places beside him. Rapidly they were borne over the ground until they came to a stop before the dais on which the Grand Mognac rested. Beside the four cylinders in which they and the Grand Mognac's messengers had traveled from the space ship to the city, another of huge proportions stood before the platform. Beside it were two instruments. From a mass of coils and tubes a long rod projected up. It was pivoted so that it could be directed toward any point. The rod on one of the instruments was blue while the other was a fiery scarlet.

"These are the weapons which will enable you to destroy your oppressors and prevent more from ever landing," said the Grand Mognac. "I must caution you, however, regarding their use. They generate a ray of almost infinite frequency, much higher than the disintegrating ray the Jovians use. Instead of resolving materials into light and energy, these devices will absolutely destroy the ether, that im-

ponderable substance which permeates and fills all space.

"Heat and light travel in waves through the ether. When it is destroyed, only blackness and entire absence of heat remain. Nothing can bear the cold of interstellar space and yet it is warm compared to the absolute cold which the absence of ether produces. When you direct one of these rays toward a Jovian ship, the ether in the ship is destroyed. No insulation against the cold of space will interfere for the ether penetrates and permeates all substance. The cold of absolute nothingness will destroy all life in the twinkling of an eye and the ship will be reduced to a puff of powder. At such a temperature, even stellanium has less strength than the most brittle substance.

"THERE are two of these devices, set to different powers. The one with the blue rod is for use against space ships either before or after they enter the atmosphere envelope. Beware of using it except when it points in a direction almost normal to the surface of your planet. These devices tap and use the enormous force of gravity itself and when they are locked to your planet, they are anchored to the center of gravity of the planet. Unless it were normal to the planet's surface, its reactive force is so great that it would disrupt the balance which holds the planet in place were the beam sent off on a tangential line.

"The other, whose projecting rod is painted red, can be used at any angle as its force is only a minute fraction of that of the other. It also must be locked to the center of gravity of the earth before it is used by means of the switch on the front. This instrument will give you power to annihilate your oppressors on earth, for while it has not the terrible force of the other, it will penetrate any protective screen which the science of Jupiter can erect. Use it only against the Jovians and when you have finished with it, destroy it that it may not fall into the hands of those who would misuse it. The other may be left intact to repel other Jovian attacks but I think you need fear none. Once they learn you have it, they will be content with their conquests of Venus and Mercury and give you a wide berth. The Jovians have had a taste of it already and they leave Mars alone. Each instrument is set in action by closing the switch on top, after closing the gravity anchor switch. To stop them, open the top switch."

Under the direction of the Grand Mognac, the Martians placed the terrible weapons in the transporter prepared for them. Turgan and Damis strove to thank the Grand Mognac for his gift but he interrupted them promptly.

"No thanks are due us," he said. "We have done that which we believe is the best for the orderly development of this galaxy of planets and there is no reason why we should be thanked. Now enter the transporters and you will be returned to your space ship. Destroy your oppressors and work for the day when Mars and Earth will march in peace toward the final goal of all life."

ACCOMPANIED by two Martian envoys, Damis and Turgan entered the cylinders and fastened them closely. They set their feet in place and grasped the handles before them. Again came the feeling of nausea and then a thought ordered them to emerge from the transporters. They emerged almost at the same instant. Before them lay the space ship with its airlock wide open. Not a living soul was in sight. Damis

leaped toward the ship, but his foot struck an obstruction which sent him sprawling. He glanced down and a hoarse cry of alarm broke from his lips. He had stumbled over the body of Kastner. The body had been horribly mutilated by some heavy instrument, one arm hanging to the torso by a mere shred of flesh. Scattered around on the ground lay other mutilated bodies.

With a shout of anguish, Turgan sped toward the open space ship. Damis, with a pale face, hastily examined the dead bodies. Eighteen of the Terrestrials lay stiff in death while the bodies of two huge Jovians in the uniform of Glavour's personal guard told the cause of their death. Damis struck by a sudden apprehension, ran from one body to the next, and in a little while he straightened up with a momentary breath of relief. Lura's body was not among them. He turned to the space ship in time to see Turgan appear in the door of the airlock, his face distorted by grief and his tall body swaying. Damis hurriedly ran to him.

"Is Lura—dead?"

He brought out the last word with an effort. Turgan's face worked for a moment before he could reply. Through the thin air of Mars came his choking voice.

"Worse," he muttered: "she is gone!"

(Concluded in the next issue.)

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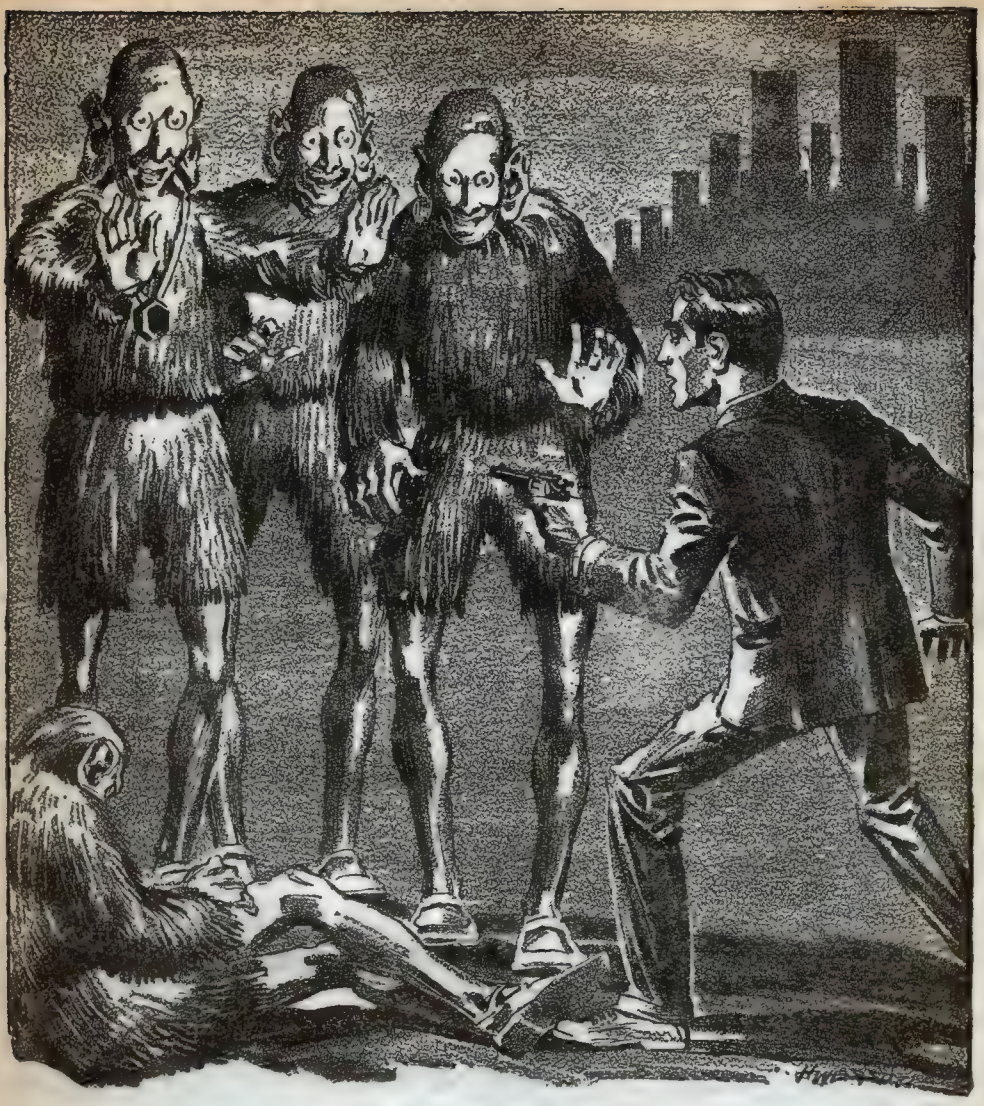


The others fell back instantly.

The Infra-Medians

By Sewell Peaslee Wright

THERE was no sense to the note. There was no sense to anything that Vic Butler did, for that matter. Where he hid away his vast scientific knowledge in that rattle-brained, red-haired head of his has always been a mystery to me. The note read:

Into a land of shadows and lost souls goes Pete Grahame in search of his hapless friends.

Dear Pete:

If you get this, I'm in a jam that promises some action.

Drive out, if plane-peddling is palling on you, and bust into the lab. I'm leaving another note there for you, old son, and after you read it you can let

your conscience be your guide.

Bring a gat along, and plenty of ammo. Hope's away, at Aunt Cleo's, so don't get in touch with her and spoil her visit.

Vic

I had a hot prospect lined up for a demonstration that morning, but I didn't even stop to give him a ring. Vic and I had been buddies ever since we were kids—and, besides, he was Hope's brother.

Vic's place was out on the river, about ten miles from town, and that little tan roadster of mine made it in just about ten minutes. The traffic in the business district slowed me up a bit.

There was nothing at all pretentious about the place; it was a rambling, lazy-looking house built largely of native stone, stretching its length comfortably in the shade of the big maples. Perrin, Vic's man-of-all-work, came hurrying out of the house to greet me as I locked my wheels on the drive before the door.

"I'm glad you're here, sir!" he exclaimed breathlessly. "I was just about to phone for the police; I was for certain, sir. Such goings on, I don't know what to think!"

"What's the matter, Perrin? Where's Mr. Butler?"

"That's it, sir! That's exactly it. Where's Mr. Butler? And—"

"Just a moment, please! Cut it short, Perrin. What's happened?"

"I DON'T know. Yesterday afternoon Mr. Butler leaves a letter for me, which I'm to mail early this morning, special delivery. It's to you, I reckon you got it, sir?"

"That's why I'm here. Go on."

"Well, after that, he locks himself up in his workroom, so Mrs. Perrin says, she being housekeeper, as you know, sir, leaving word not to disturb him for dinner.

"We don't think so much of that, Mr. Butler being took with streaks of working at all hours, as you know. But when Miss Hope came home unexpected this morning—"

"What?"

"She cut her visit a few days short, her aunt having other house guests turn up unexpected like, and Miss Hope arrives first thing this morning, being here when I return from town after mailing the letter to you, sir.

"Mrs. Perrin had just told her about the master, and Miss Hope looks into his room. He isn't there, and the bed hasn't been slept in. 'The poor dear,' she says, 'he's worked himself half to death, and dropped off on that horrible cot he keeps in his laboratory,' says Miss Hope. 'I'll let him sleep.'

"But just a few minutes ago, just before you arrived, sir, she became nervous like, and rapped on the door. There wasn't a sound. So she went up to the master's room and found a key, and went in. And now *she* don't answer, and we were just about ready to call the police!"

"Let's go inside!" I hurried by Perrin and through the cool, quiet hall to the broad door that opened into the big room at the back of the house, which was Vic's laboratory.

"VIC! Hope!" I pounded as hard as I could, shouting their names. There was no response.

"Is there another key, Perrin?" I snapped.

"No, sir; none that I know of. The master was mighty fussy about his workroom."

"Can we get in through the windows?"

"No. They're barred, if you remember rightly, and fitted with this frosted glass, so you can't see in, even."

"Then get me an ax!" I commanded. "Quick!"

"An ax?" hesitated Perrin.

"An ax—and be quick about it!"

Perrin mumbled a protest and hurried away. I turned to Mrs. Perrin, who had come up to determine the result of my shouting.

"How long is it since Miss Hope went in there?"

"How long, sir? I'd say about twenty minutes before you came. Maybe twenty-five. I wasn't paying any particular attention, sir. She just got the key and went in. After a few minutes I heard something buzzing in there, and I thought maybe Mr. Butler was showing her some new gadget of his, like he was always doing. Then there was a telephone call for him, and I couldn't make neither of them answer; that's when Mr. Perrin and I began to get worried."

"I see." Perrin came hurrying up with the ax, and I motioned them aside. I swung the ax, and the head of the weapon crashed against the lock. The knob dropped to the floor with a clatter, but the door gave not at all.

I brought the ax down again, and something cracked sharply. The third blow sent the door swinging wide.

Cautiously, fearing I know not what, I entered the familiar room. Nothing, apparently, had been disturbed. There was no sign of disorder anywhere. The blankets on the narrow cot in the corner of the room had not been unfolded.

But neither Vic nor Hope were anywhere in sight.

"YOU and Mrs. Perrin stay there by the door," I suggested. "I don't know what's wrong here, but something's happened. There's no need for all of us entering."

My second glance around the room was more deliberate. To my right were the big generators and the switchboards, gleaming with copper bus-bar, and intricate with their tortuous wiring. Directly before me was the long work-bench that ran the full length of the room, littered with a dozen set-ups for as many experiments. At my left was a sizable piece of apparatus that was strange to me; on a small enameled table beside it was a rather large sheet of paper, weighted down with a cracked Florence flask.

In a sort of panic, I snatched up the paper. Vic had said in his note, that he would leave another note for me here. This was it, for in a bold scrawl at the top was my name. And in hardly decipherable script, below, was his message:

Dear Pete:

First of all, let me say that you've no particular call to do anything about this. If I'm in a jam, it's my own doing, and due to my bull-headedness, of which you have so often reminded me.

Knowing your dislike for science other than that related to aeronautics, I'll cut this pretty short. It'll probably sound crazy to you, anyway.

You know that there's sound above the frequencies to which the human ear will respond. You know there are light rays that the human eyes can't perceive. Some work I've been doing the last five or six months indicates that there's a form of life about us, all around us, which isn't perceptible to our senses—which doesn't mean that it doesn't exist.

Well, I'm going to do a little exploring. I'm going to take a whirl at what I'll call the Infra-Median existence. What I'll find there, I don't know. Life of some kind, however, for my experiments prove that. Possibly not friendly.

All this being so, there's an off chance that I'll find myself tangled with something I can't anticipate. And if you are called upon to read this, then something has gone wrong with my plans.

Should you wish to take a flier after me, stand in the center of the square outlined by the four uprights of the device beside which this little table stands. Be sure your weapon—I told you to bring a gat—is on your person.

There's a small instrument board set on one of the posts. Turn the upper of the two dials until the hand of the meter beside it moves up to 2700 exactly. Wait a moment, until you're sure you have the exact reading. Then turn the second dial until the two red lines coincide, and as you do so, mark the time. The thing is set to operate the reverse cycle at three-hour intervals exactly. When you come down, you'll start a new cycle, and it might be important for us to know at just what minute we can get back to our own plane.

If you decide to try it, tell Perrin to do nothing for at least a week. If the law started experimenting on this equipment, we never could climb back. And leave word with them for Hope; tell her I'll scramble out somehow—that *we* will, if you decide to try your luck.

Vic

Underneath, in Hope's clear, purposeful hand, was this:

Peter dear:

Not knowing when you'll arrive, I'm going on ahead. We must give Vic a hand—mustn't we?

H.

NATURALLY, I didn't understand Vic's jargon about frequencies and light-rays, for I thought more about football than physics in college, but two things were clear to me. One was that Vic had plunged into some sort of wild experiment, and the other was that Hope had followed him. The rest didn't matter very much.

"Perrin! Mr. Butler and Miss Hope are safe. Everything is explained in this note. You and Mrs. Perrin are to leave me here, and not disturb anything. Do nothing at all for at least a week. If we aren't all back here before that time . . . take any action you see fit. Understand?"

"No-no, sir. Where—"

"You understand the orders, anyway. That's all that's necessary. Close the door—and keep it closed at least a week!" I glared at him, and Perrin closed the door.

The apparatus Vic had mentioned was my first thought. It consisted primarily of four tall, slim posts, set in the form of a square, about a yard apart, and supported by heavy copper brackets mounted on a thick base of insulating material, and each post bore at its top, like a stalk with a single drooping flower, a deep, highly polished reflector, pointing inward and downward. The whole effect was not unlike the skeleton of a miniature skyscraper.

I strode between two of the high, slim black pillars and glanced upward. All four of the reflectors seemed pointed directly at my face, and I could see that each held, not the bulb I had expected, but a crudely shaped blob of fused quartz.

THERE was nothing to be gained by examining the peculiar machine, and therefore the one quick glance sufficed. If Vic and Hope had gone this route, I was anxious to follow. I glanced down

at the papers in my hand, and slowly turned the first dial on the little instrument board, narrowly watching the hand of the meter beside it, as Vic had instructed.

The hand moved slowly, like the hand of an oil-gauge in which the pressure is gradually built up. Twenty-one . . . twenty-five . . . twenty-six . . . *twenty-seven.*

I waited a moment, conscious only of the faint hum of a generator at the other end of the room, and the quivering hand of the meter. I turned the dial back an imperceptible degree, and the hand steadied down exactly upon the numerals "2700." Then I touched the next dial.

This second dial was no more than a thin disk of hard rubber or bakelite, with a red scratch-mark on one side. On the panel itself, far to the right of the dial's zero point, was the red scratch-mark that matched it. When the two coincided—well, something happened.

I was conscious of a faint glow from above as I moved the dial slowly, so that its red mark approached the stationary one upon the panel. I glanced up swiftly.

EACH of the little blobs of quartz was glowing; each with a light of different color. One was a rich amber, one a pale green, one a vivid, electric blue, and one was fiery red. The intensity of the light increased steadily as I moved the dial.

I could not only see the light; I could feel it. It beat upon my body; throbbed all around me. I had a feeling that the mingling rays of light conflicted with each other.

It seemed to me for a moment that I was growing as light as air; that my feet were drifting off the floor, and then, as the red line of the dial came closer to the indicated point, the feeling left, and I suddenly seemed very heavy. I could hardly support my own weight; my legs were trembling with the burden; sweat broke out over my whole body; the rays of light beat down upon me fiercely, overpoweringly. . . .

Desperately, I quickly turned the dial until the two red marks coincided. A great weight, soft and enveloping, seemed to drop upon me. The senses of sight and hearing and feeling all left me. I could only think—and my thoughts were horrible.

Then, suddenly, there was a terrific crash of sound, and my senses returned.

I looked around. It seemed that an instant before I had been standing there in Vic's laboratory, slowly turning the second of the two dials, while the four lights beat down upon my body. And now . . . and now I was standing in the open, on another world. A nightmare world that words seem inadequate to describe.

THE sky was an angry, sulphurous green, pressing low upon a country utterly flat and nearly barren. The only sign of vegetation I could perceive were strange growths that remotely resembled trees—inverted trees, with wide-spreading branches hungrily nursing the black and barren soil, and gnarled, brief roots reaching out tortured arms toward the forbidding sky.

To my left, and some distance away, a vast number of blunt and ugly towers rose against the sinister skyline, but no form of animal life seemed in evidence. Wonderingly, my head whirling, whether from my strange experience or from the shock of finding myself in what was obviously another world, I do not know, I turned toward the city. And as I took my first step, there materialized suddenly out of the thin and ill-smelling air, the figures

of perhaps a dozen monstrous creatures.

They were, in effect, men. That is, they had a head, a torso, two arms and two legs apiece. But they were not human. Those huge round eyes, unblinking and browless, were not human, nor were their slitted, sunken mouths. They were not human beings; they were images of despair.

Their thin legs seemed to buckle at the knees, their arms drooped from their shoulders, their mouths sagged at the corners, even their huge ears hung down like a hound's. Their round, dark eyes, deeply recessed, were caverns of despair.

THEY were clothed in some coarse, black stuff that bristled as though loosely woven of stiff hair, and yet which was not a true fabric, for it seemed to move within itself, and scintillate, as though composed of billions of restless motes. And as the strange creatures closed in quickly, I saw that theirs was not solid flesh, but, like the clothing that partially covered them, an attenuated substance that was not quite real.

Have you ever sat close to the screen in a motion picture theatre, so that the graininess of the moving film was visible? These creatures were like such shadows, seen in three dimensions.

I retreated two or three swift steps, jerking the revolver from my pocket.

"Back!" I warned, hoping they would understand the tone of voice if not the words. "Back—or I'll pot a couple of you!"

They glanced at each other, swiftly, almost as though they understood. It seemed to me that their mouths lifted; that they almost smiled. Then they rushed at me.

I had only one box of cartridges, besides those in the cylinder of my gun. I didn't know what might be in store for me, and I took no chances.

My first shot sent one of the creatures spinning to the ground. Two more were almost upon me before I could level the weapon and pull the trigger again. I got them both.

The rest of that unholy crew were grinning, and their eyes were shining with anticipation. They closed in upon me eagerly, each apparently doing everything in his power to invite my attention. It was bewildering, and I watched them warily, suspecting a trick. There were only three more cartridges left in my gun, and I did not dare replace the fired shells for fear they would rush me when the action was open and the gun momentarily useless.

I WAS just about to risk one more cartridge when another figure materialized in the ranks of the enemy; a taller, commanding figure, with a shining jewel, perhaps a mark of authority, dangling from his corded brown throat.

The others fell back instantly, and the newcomer approached me swiftly, holding out his hands as though in supplication.

So I was to receive a cordial welcome after all! I breathed a sigh of relief, and pocketed the weapon—and instantly the dark eyes flashed angrily. I held out both hands, to show that they were empty, trying to express my willingness to be friends.

He hesitated, and then uttered a high-pitched sound that I presumed to be a word of command. Before I could free the gun again, the creatures had me, and while their flesh looked more unnatural and unreal than ever, at close range, their long fingers gripped me like talons of steel. The being which had uttered the command disappeared, and my captors led me,

struggling and protesting, toward the black, ugly towers of the city.

Over the barren, rocky ground we hurried; past the wretched hovels on the outskirts of the city, and through crooked, dismal streets, toward the center of the city.

A great crowd of creatures similar to my captors hemmed us in. Before us, they thinned into nothingness as we approached, only to swarm into being in some other spot. It was terrifying; an unbelievable experience that made me question my sanity. The only vestige of comfort left me was the hope that they were taking me to Hope and Vic.

AT the entrance of one of the huge misshapen black buildings, the creature with the brilliant stone at his throat appeared as suddenly as a light flashes up in the darkness. With him were two others, each wearing a similar jewel of authority. They stood aside for us to enter, and then followed us down a long corridor which was not lighted by any device I could discern, and yet which was not dark.

A broad door swung open, and I was thrust through the doorway.

"Pete!" shouted a familiar voice, and I scrambled to my feet. There was Vic, his red hair tousled, and his face gray with worry. Behind him, her big blue eyes brimming, her lips quivering, was Hope.

"Vic! Well, here I am. And Hope, dear. . . ."

My voice trailed off. These were not Vic and Hope before me; they were unreal creatures, like the beings which had captured me. I could recognize the face and the figure of the woman I loved and of her brother; but they seemed to have no substance.

Hope suddenly put her arms about me. She was sobbing.

"Don't, Peter!" she whispered. "Don't look at me like that. I know how you feel. You—you and Vic—you aren't real to me, either! We're just shadows—lost souls. . . ."

"Buck up, Hope!" Vic's voice was kindly, yet firm and gravely commanding. "We're all right. Only—temporarily—we're Infra-Medians. Sit down, Pete, and let's talk. It may be that there's no time to lose in making some plans."

"FIRST of all," I insisted, "tell me where we are; what's happened to us. Do you know?"

"Where we are? Surely. Looking at it in one way, we're less than a mile from my laboratory."

"But, Vic!" I protested. "Do you really mean that we're less than a mile from your laboratory; from our own world? If we were, we could see it; we'd bump into our own trees and houses and people; we'd be knocked down by automobiles, and—"

"Two bodies cannot occupy the same space at the same time. Old law of simple physics. Is that what you mean?" interrupted Vic.

"Why, yes."

"And a body; what's that?"

"A body? Why, matter, I suppose."

"And matter is what?"

"Anything that occupies space," I replied triumphantly. I had remembered that much from my physics classes.

"True," smiled Vic. "But let's see. It is possible to have sound and light in the same place, isn't it? We can even add other things: heat and electricity, for example. Speaking of electricity, a tremendous current of it adds nothing to the weight of the wire carrying it, and nothing to its bulk, unless we have a heating overload. Current enough to kill a thousand men, or to do the work of a million horses, weighs nothing, is invisible, and actually does nothing until released

in some form or other, either by acident or design."

"True, but electricity isn't matter. Our old world is matter; I'm matter, and you're matter. Why don't we bump into things?"

"Our old world is matter, true enough, but for the rest, you're wrong, Pete, old son. You're *not* matter, any more. You're something else. In terms of our own being, you do not exist in your present form. This world does not exist. And the reverse is just as true."

I STARED at him, bewildered.

"What am I, then—a ghost?"

"Nothing of the sort. You're old Pete Grahame, a darned good halfback, and the world's rottenest scientist. Only you've been passed into another form of being, through the action of four little quartz bulbs whose periods of vibrations form a beat—but that's over your head, Pete, old son, and we'll have time to talk over details when we get back. Right now, we're in somewhat of a jam." Instinctively, he glanced at Hope; it was her danger, and not his own, that had brought that haggard pallor to his face in so short a time.

"That's what I don't understand. What do these people—if you can call them that—want of us?"

Vic looked down, frowning.

"I'm not sure I'm right," he replied after a moment, "but if I am—they wish us to kill them. As many as possible.

"When I found myself here, I wandered nearly to the city before I was molested. When they did appear, and tried to lay hands on me, I warned them back, and finally shot one of them.

"The effect was magical. They seemed unable to believe the evidence of their eyes. They rushed me eagerly, each seeming to beg for a bullet.

"I gave them what they wanted, still hoping I could frighten them away. A great crowd formed around me, and the rabble was sent flying by a number of the men who seem to hold some office, distinguished by a jewel-like emblem around their throats. If I read their actions correctly, they claimed the privilege of death by virtue of their greater authority.

"WELL, I finally decided that my gun did anything but frighten them. They were angry when I refused to do any more slaughtering, and led me here. Every once in a while one of the captains would come in and command me to kill him. I refused, for that's the only trump card I held.

"When Hope, here, acted like the foolish little kid she is, she was not even armed, and they rushed her here without delay. My theory is that these people live in a dreary world in which there is no pleasure. Their faces seem to show that. Apparently they live a very long time, and have no means of shortening that life. They are not intelligent. Things that would kill a man of our own world have no effect on them, for remember that they are not physical beings. You have seen them appear out of thin air, and dissolve in the same fashion?"

"Yes."

"That is simply their mode of transportation. They pass invisibly through the air, just as electricity passes through a wire; quickly, invisibly, silently. Then they assume their original form where they will—just, again, as electricity passes from the end of the wire exactly the same as it entered it, allowing only for voltage drops and some other factors that aren't pertinent here.

"What we must do, and right now, is to settle upon some means of getting to the proper spot at the proper time. You marked the

moment of your departure, I suppose?"

"Exactly." I glanced down at my wrist watch, and noted with relief that it was still running. I observed then, for the first time, that the watch, my clothing, and even my hand, were not real; they were like the rest of the things in this monstrous state that Vic called Infra-Media. "I left at three after ten. It's now fourteen minutes of eleven—Good Lord! Less than an hour since I stood there in your laboratory!"

"Then our next chance to get back will be at three minutes after one," nodded Vic. "I wonder if there is any chance of—"

BEFORE he could complete the sentence the door was flung open, and five of the older men, led by a sixth with a larger jewel at his throat, filed solemnly into the room and motioned that we were to leave.

At the doorway, a double file of creatures closed in about us, and we were led, by long corridors and mighty winding ramps, toward the top of the building.

"Now what?" I whispered to Vic.

"I don't know. That chap with the big stone at his throat seems to be the head man of the city. I think his name is Ee-pay; the others seem to call him that. Maybe it's just a title. But what they're up to now, I can't even guess. Keep your eyes open for a chance to get away, though. How are you feeling, Hope?"

"All excited!" She tried to smile, and almost succeeded. Hope was game all the way through. "What an adventure this will be to talk about when we're old and rheumatic!"

"Good kid!" said Vic, and I pressed her hand as comfortably as I could. We turned a bend in the long ramp we had been climbing, and came out upon the vast, level top of the building.

Thousands of the unreal creatures of this world were crowded around a vast, hideous image that rose from the center of the space; a monster so terrible that Hope cried out at the sight, and Vic exclaimed under his breath.

For myself, I seemed stricken dumb; I could only stare at this black and ghastly god of these people.

THE carven image was perhaps thirty feet in height, and represented a figure crouched upon its knees, its head bent very low and at the same time tilted at a grotesque angle so that the face smiled heavenward; the hands, palms upward, extended invitingly just below the chin.

As our party appeared, an aisle opened, and we were marched through the assembled crowd, directly toward the idol. A high-pitched, sibilant chant arose from the multitude, and a procession of very ancient beings, whom I took to be the priests of this god, came in single file from behind the black god, directing the chanting with movements of their arms. They were lighter in color than the others, and much more intelligent, to judge by their faces. Their eyes held none of the sadness which was the most marked characteristic of the others. Each wore upon his forehead a gleaming scarlet stone, bound in place by a circlet of black metal, or what looked like metal.

We paused, and the chanting went on and on, until I began to wonder if anything would ever happen. And then, at last the chanting ceased, and three of the priests moved toward us, followed by an elderly being who wore the same symbol of power or authority that I had already noted upon the creature Vic called Ee-pay.

One of the priests spoke sharply, commandingly, to Ee-pay, and the latter nodded—not agreeably it seemed to me.

"The old boy doesn't like these other chaps; priests, I take it," whispered Vic. "I think they've been messing up his plans. See; he's motioning us to watch."

THE priests led the old man back to the idol. Eagerly, he clambered upon the outstretched hands, and stood there facing the grinning face, stroking the polished cheeks with beseeching fingers. The priests sank to the floor, bending themselves in mockery of the image. Four times they touched their foreheads to the ground, and as the fourth gesture was completed something moved swiftly behind the lips of the image, as though a plate had lifted for a moment and dropped again.

There was a sharp, murmuring sound, as of a harp-string softly plucked. A scarlet haze of light shot forth from the mouth of the black god, and the old man stepped back sharply as though struck by some invisible agent. He would have fallen, but as he crumpled, his body seemed to soften and shatter into a scintillating cloud. An instant later there was no trace of him anywhere.

"Hm-m! The great reward for some notable service rendered, I imagine," whispered Vic. "Those priests are wiser than the rest of this crew. They deal death sparingly, and that makes them great. They love life like a man of our earth; perhaps because they've found out how to enjoy it."

"But what does the work; what killed him?" I asked breathlessly.

"Can't say, Pete. You can't name things here in terms of our own world. Some natural force they've corraled, I imagine. They control it with that shutter behind the lips of the image. Did you notice it?"

"Yes. I suppose one of the priests operates it from some hidden room. Whatever it is, it certainly does the work. And what do you suppose they want us to do now?"

THE three priests were coming toward us, smiling. I didn't like their smiles; they were meant to be benign, but there was a cruel and vindictive twist to their lips which chilled me through and through.

"Keep your hand on your gun," said Vic swiftly. "I don't like the looks of these chaps."

The priests stopped before us and their leader began a long harangue in a screechy voice which set my nerves on edge. When he had finishd he held out his hands toward me, and motioned toward the waiting idol.

Ee-pay spoke up in sharp protest, and thrust himself between me and the priest. For a moment, due to this obviously unexpected interruption, everything was in confusion.

"Pete!" Vic was whispering excitedly in my ear. "Listen, Pete, I think I see through this. These priests have heard about us and our death-dealing ability. They're jealous; they want a corner on that. Old Ee-pay figures maybe we could do him a favor in that line, and that's why he's arguing. The priests want to honor us for the good we've done—by giving us the reward we've just seen. So—"

Before he could finish, Ee-pay was thrust aside by a group of angry guards, and I was jerked away. Hope screamed, and out of the tail of my eye I saw both Vic and Hope struggling frantically to free themselves from an overwhelming number of guards. Vic tried to shout something, but a claw-like brown hand was immediately thrust over his mouth.

THE guards who held me, followed by the priests, made their way toward the extended palms which formed the altar of this strange black god whose favor was death. At a command from the priests, the guards lifted me to the altar and then stood watchfully below, gazing up at me with puzzled, mournful, envious eyes.

I saw the priests crouch low, and make their first beseeching bow, in imitation of the black god. Frantically, I looked about me, seeking some avenue of escape.

Below me, hemming me in, were the guards; a triple ring of them, through which I knew I could not escape. Behind me, for I was facing the multitude, was the hideous, grinning face of the idol.

The priests bowed a second time.

Both Hope and Vic were fighting desperately, but there were at least ten guards to each of them. I lifted my hand and waved a farewell, hoping that one of them at least would see the gesture and know that my last thought was of them.

Then, as the priests completed their third bow, I turned and faced the statue.

As my eyes fell upon the shutter behind the thick, grinning lips, the shutter which released the lethal force, a wild and desperate idea came to me. With a shout, I jerked the gun from my pocket and leaped aside. As I did so, I fired twice into the gaping mouth, and saw the bullets shatter the heavy shutter. Then, with the humming sound ringing in my ears like a note of death, I leaped clear, into the midst of the waiting guards.

FOR an instant, there was no movement, no sound, from all that vast crowd. Even the guards seemed stunned, and I tore my way through them with hardly a pause in my stride.

Then a shrill cry went up; a cry that drowned utterly the humming sound that issued from the shattered mouth of the idol. Blindly, the multitude surged towards the scarlet ray that dealt death, fighting their way toward the oblivion they so highly prized.

Those who had been holding Hope and Vic were surging forward with the rest, their erstwhile prisoners forgotten in their mad greed for death. The crowd jostling about me seemed blind to my presence; every eye was fixed on the altar-like hands of the idol, and the death that blew across them.

"Pete!" yelled Vic. "Coming, boy?" He was waiting for me, staving off as best he could the rush of bodies around him; shielding Hope from the savage jostling.

"Coming!" I leaned forward, butting with my head, both doubled fists working like pistons to clear a way to my companions.

"Nice work, Pete!" shouted Vic, as I joined them, breathless but triumphant. "Now for a break! Gun loaded?"

I snapped open the action and dropped in six cartridges.

"It is now. I'll go ahead; you bring up the rear with Hope in the middle. Ready?"

"Let's go!"

I PLUNGED on, Hope's fingers gripping my belt. Fresh multitudes were pouring up the ramp, brushing aside the five or six priests that had hurried there in an effort to stem the tide.

One of the priests saw us, and cried out shrilly to his companions. With one accord they came toward us, obviously intent upon blocking our way. I have never seen in any other eyes such anger and hatred as blazed in the eyes of those strange beings.

"Watch them, Pete!" roared Vic. "We can't take chances!" His gun

roared twice from behind me, and two of the priests fell writhing, to be instantly trampled into pulp. Another reached out long arms toward Hope, and I let him have it. There was nothing else to do. He went the way of the two others.

Twice again, before we reached the ramp they guarded, the angry attendants of the idol fell before our guns. Then, hurrying down ramp after ramp, corridor after corridor, fighting the rushing mob all the way, we came at last, shaking with weariness and gasping for breath, to the deserted streets of this black and terrible city.

"Are we free?" whispered Hope, holding tightly to my arm. "Are we really free?"

"I hope so, dear. We seem to be. If we can only reach the spot where we entered this insane world before something happens—"

"How much time have we?" interrupted Vic.

I glanced down at my watch, fearful, for a moment, that it had been broken or lost in the melée. It was still running, apparently undamaged.

"Let's see; it's four minutes of one. That gives us seven minutes. Can we make it?"

"I think so. It's not so far, and we're nearly out of the city. We *have* to make it!"

VIC led the way, Hope and I following. Anxiously, I watched the minute hand of the watch slide toward the "XII" of the dial . . . touch it . . . move on. . . .

It was not far, as Vic had said, but we were weary from our battle with the crazed mob, and the best we could force from our legs was a sort of dog-trot

One minute after . . . two. . . .

"Here's the spot! I marked it with these three pieces of stone. Quick!" Vic swept both arms about Hope and me, holding us in a close embrace, so that we all stood within the triangle formed by the three bits of black rock.

I glanced down at my watch. It lacked but a few seconds of the moment when the machine back in Vic's laboratory would function—provided my watch was correct, and the equipment worked according to schedule.

Suddenly, Hope screamed, and I followed her eyes. A score or more of the strange beings had suddenly materialized but a few yards away, and they were closing in on us swiftly.

I tried to draw my gun. Hands reached out to grasp me; to grasp all three of us. Then darkness closed in swiftly; I was whisked upward, on and on, breathlessly. I was suddenly very heavy; I was dropping in the blackness . . . there was something solid beneath my feet . . . a glare of light in my eyes.

"Nicely timed, I'll say that," chuckled Vic. "How does our own material little old world look?"

"Great!" I stepped quickly away from the machine, drawing Hope with me. "Doesn't it, Hope?"

She sighed, a long, shuddering sigh, and snuggled into my arms. Vic glanced towards us and grinned.

"Come to think of it," he remarked, "I believe I'll run along and see if I can find Mrs. Perrin. I haven't had a thing to eat since noon yesterday, and I've just realized I'm hungry. Will you join me?"

"In a moment," I nodded, and Vic, being the good scout he was, hurried away.

"AND the machine?" I asked a few nights later. "Still experimenting with it?" I had really come out to see Hope, of course, but she was still upstairs, putting on the finishing touches.

Vic shook his head quite gravely.

"No, old son; I had enough. Off on another tangent now. Why—would you like to go back?"

"Not me! It doesn't seem real now; more like a nightmare, but it was terrible enough at the time."

"I can prove it wasn't a nightmare," chuckled Vic. "Come along, and I'll show you something you missed." He led the way to the laboratory, and unlocked a drawer, one of several, beneath the work table.

"I found this on the floor of the machine," he said. "Didn't notice it until later. The rays of the machine caught it and brought it back with us; made it solid matter, as we know it here. Do you recognize it?"

I nodded, shuddering. There was no possibility of mistake.

In a squat, clear bottle of alcohol that Vic had taken from the drawer was a sinister, claw-like brown hand, severed cleanly at the wrist.

Harnessing Solar Energy

THE problem of using the vast energy of the sun for human purposes is nearing a solution. Dr. Bruno Lange of the Kaiser Wilhelm Institute has recently perfected a device which converts sunlight into electric current more completely than ever before, at a price which may compete with present hydroelectric installations.

The exhaustion of the world's coal supply in a few hundred years is no longer to be feared if Dr. Lange's claims are justified. On the contrary, there would be more power than ever before. An expansion of human engineering activities to a new scale, similar to what happened after the invention of the steam engine, is foreshadowed by this latest development in photo-electricity.

Talking pictures, television and automatic control devices in every branch of technology will be the first to benefit by the new light-sensitive cell. The light-sensitive vacuum tubes containing potassium or caesium, which tubes have played a fundamental part in recent engineering developments will probably be replaced in most of their uses by the cheaper and simpler Lange device.

Silver selenide is the substance which best does the trick of converting light to electricity at present. A sheet of metal is covered with a thin layer of silver selenide, which in turn is coated with a transparent layer of a second metal only a few molecules thick. Light passing through the transparent film sets up a current between the layers of the metallic sandwich.

Fifty to a hundred and fifty times more current is obtained from this than from a similar sandwich of copper oxide between two layers of copper, which was the immediate forerunner of the silver selenide cell. The superiority of the copper oxide sandwich over all other converters then known was discovered three years ago.

Experiment has verified the conjectures about the possible applications of such cells. A copper oxide cell three inches square has driven an electric motor by dull sunlight for some months now in the Siemens Laboratory in Berlin.

The new photocell developments promise an entirely new method of power production. The energy of the sun's rays streaming down ceaselessly day after day on the surface of the earth means just now an enormous waste of power. Dr. Lange has given a method which may prove successful in putting the sun to work for man throughout the future history of the world.

It is just possible the world is standing at a turning point in the evolution of civilization similar to that which followed the invention by James Watt of the steam engine.

For coal is not only limited in amount. It is also an extremely inefficient vehicle for the sun's energy. The power which can actually be used—for instance, in an incandescent lamp—is a small fraction of 1 per cent of the total sunlight stored in part in the coal, the burning of which at the generating station produces the electric current. Dr. Lange's invention promises to put much of the other 99 per cent to use.

Serious problems will, of course, be raised by the fact that the supply of sunpower will not be continuous. Whether these will be solved by some form of storage arrangement or by operating the photogenerators in conjunction with some other kind of generator cannot be said at present. The energy storage problem is closely linked with that of power sources.

A steam turbine plant using coal is, of course, cheaper to install, but the running costs in labor, fuel and maintenance of equipment are much greater.

Morale

A Story of the War of 1941-43

By Murray Leinster

PART I

". . . The profound influence of civilian morale upon the course of modern war is nowhere more clearly shown than in the case of that monstrous war-engine popularly known as a 'Wabbly.' It landed in New Jersey Aug. 16, 1942, and threw the whole Eastern Coast into a frenzy. In six hours the population of three States was in a panic. Industry was paralyzed. The military effect was comparable only to a huge modern army landed in our rear. . . ."

(*Strategic Lessons of the War of 1941-43.* —U. S. War College. Pp. 79-80.)

SERGEANT WALPOLE made his daily report at 2:15. He used a dinky telephone that should have been in a museum, and a rural Central put him on the Area Officer's tight beam. The Area Officer listened drearily

It spouted a flash of bluish flame.

as the Sergeant said in a military manner:

"Sergeant Walpole, sir, Post Fourteen, reports that he has nothing of importance to report."

The Area Officer's acknowledgment was curt; embittered. For he was an energetic young man, and he loathed his job. He wanted to be in the west, where fighting of a highly unconventional nature was taking place daily. He did not enjoy this business of watching an unthreatened coast-line simply for the maintenance of civilian confidence and morale. He preferred fighting.

The Wabbly, uncombatable engine of war, spreads unparalleled death and destruction — until Sergeant Walpole "strikes at the morale" of its crew.

Sergeant Walpole, though, ex-

haled a lungful of smoke at the telephone transmitter and waited. Presently the rural Central said:

"All through?"

"Sure, sweetie," said Sergeant Walpole. "How about the talkies tonight?"

That was at 2:20 P. M. There was coy conversation, while the civilian telephone-service suffered. Then Sergeant Walpole went back to his post of duty with a date for the evening. He never kept that date, as it turned out. The rural Central was dead an hour after the first and only Wabbly landed, and as everybody knows, that happened at 2:45.

BUT Sergeant Walpole had no premonitions as he went back to his hammock on the porch. This was Post Number Fourteen, Sixth Area, Eastern Coast Observation Force. There was a war on, to be sure. There had been a war on since the fall of 1941, but it was two thousand miles away. Even lone-wolf bombing planes, flying forty thousand feet up, never came this far to drop their eggs upon inviting targets or upon those utterly blank, innocent-seeming places where munitions of war were now manufactured underground.

Here was peace and quiet and good rations and a paradise for goldbrickers. Here was a summer bungalow taken over for military purposes, quartering six men who watched a certain section of coastline for a quite impossible enemy. Three miles to the south there was another post. Three miles to the north another one still. They stretched all along the Atlantic Coast, those observation-posts, and the men in them watched the sea, languidly observed the television broadcasts, and slept in the sun. That was all they were supposed to do. In doing it they helped to maintain civilian morale. And therefore the Eastern Coast Observation Force was enviously said to be "just attached to the Army for rations," by the other services, and its members rated with M. P.'s and other low forms of animal life.

Sergeant Walpole reclined in his hammock, inhaling comfortably. The ocean glittered blue before him in the sun. There was a plume of smoke out at sea indicating an old-style coal-burner, its hull down below the horizon. Anything that would float was being used since the war began, though a coal-burning ship was almost a museum piece. A trim Diesel tramp was lazing northward well inshore. A pack of gulls were squabbling noisily over some unpleasantness floating a hundred yards from the beach. The Diesel tramp edged closed inshore still. It was all very peaceful and placid. There are few softer jobs on earth than being a member of a "force in being" for the sake of civilian morale.

BUT at 2:32 P. M. the softness of that job departed, as far as Sergeant Walpole was concerned. At that moment he heard a thin wailing sound high aloft. It was well enough known nearer the front, but the Eastern Coast Observation Force had had no need to become unduly familiar with it. With incredible swiftness the wailing rose to the shrillest of shrieks, descending as lightning might be imagined to descend. Then there was a shattering concussion. It was monstrous. It was ear-splitting. Windows crashed in the cottage and tinkled to the sandy earth outside. There was a pause of seconds' duration only, during which Sergeant Walpole stared blankly and gasped, "What the hell?" Then there was a second thin wailing which rose to a scream. . . .

Sergeant Walpole was in motion before the second explosion came. He was diving off the veranda of

Post Number Fourteen. He saw someone else coming through a window. He had a photographic glimpse of one of his men emerging through a doorway. Then he struck earth and began to run. Like everybody else in America, he knew what the explosions and the screamings meant.

But he had covered no more than fifty yards when the third bomb fell from that plane so far aloft that it was not even a mote in the sky. Up there the sky was not even blue, but a dull leaden gray because of the thinness of the atmosphere yet above it. The men in that high-flight bomber could see the ground only as a mass of vaguely blending colors. They were aiming their bombs by filtered light, through telescopes which used infra-red rays only, as aerial cameras did back in the 1920's. And they were sighting their eggs with beautifully exact knowledge of their velocity and height. By the time the bombs had dropped eight miles they were traveling faster than the sound of their coming. The first two had wiped out Posts Thirteen and Fifteen. The third made no sound before it landed, except to an observer at a distance. Sergeant Walpole heard neither the scream of fall nor the sound of its explosion.

HE was running madly, and suddenly the earth bucked violently beneath his feet, and he had a momentary sensation of things flying madly by over his head, and then he knew nothing at all for a very long time. Then his head ached horribly and someone was popping at something valorously with a rifle, and he heard the nasty sharp explosions of the hexynitrate bullets which have remodeled older ideas of warfare, and Sergeant Walpole was aware of an urgent necessity to do something, but he could not at all imagine what it was. Then a shell went off, the earth-concussion banged his nose against the sand, and the rifle-fire stopped.

"For Gawd's sake!" said Sergeant Walpole dizzily.

He staggered to his feet and looked behind him. Where the cottage had been there was a hole. Quite a large hole. It was probably a hundred yards across and all of twenty deep, but sea-water was seeping in to fill it through the sand. Its edge was forty or fifty feet from where he stood. He had been knocked down by the heaving earth, and the sand and mud blown out of the crater had gone clean over him. Twenty feet back, the top part of his body would have been cut neatly off by the blast. As it was. . . .

HE found his nose bleeding and plugged it with his handkerchief. He was still rather dazed, and he still had the feeling that there was something extremely important that he must do. He stood rocking on his feet, trying to clear his head, when two men came along the sand-dunes behind the beach. One of them carried two automatic rifles. The other was trying to bandage a limp and flapping arm as he ran. They saw the Sergeant and ran to him.

"Hell, Sarge, I though y'were blown to little egg-shells."

"I ain't," said Sergeant Walpole. He looked again at the hole in the ground and swore painedly.

"Look at that," said the man with the flapping arm. "Hell's goin' to pop around here, Sarge."

The sergeant swung around. Then his mouth dropped open. Just half a mile away and hardly more than two hundred yards from the shoreline, the Diesel tramp was ramming the beach. A wake still foamed behind it. A monstrous bow-wave spread out on either hand, overtopping even the combers that came rolling in. It was being deliberately

run ashore. It struck, and its foremast crumpled up and fell forward, carrying its derrick-booms with it. There was the squeal of crumpled metal plates.

"Flyin' a yeller flag just now," panted one of the two privates. "We started poppin' hexynitrate bullets at her an' she flung a shell at us. She's a enemy ship. But what the hell?"

Smoke spurted up from the beached ship. Her stern broke off and settled in the deeper water out from the shore. More smoke spurted out. Her bow split wide. There were the deep rumbles of black-powder explosions. Sergeant Walpole and his two followers stared blankly. More explosions, and the ship was hidden in smoke, and when it blew away her funnel was down and half or more of her upper works was sliding into the sea, and she had listed suddenly.

SERGEANT WALPOLE gazed upward. Futilely, of course; there was nothing in sight overhead. But these explosions did look like the hexynitrate stuff they put in small-arm bullets nowadays. A thirty-caliber bullet had the explosive effect of an old-style six-pound T.N.T. shell. Only, hexynitrate goes off with a crack instead of a boom. It wasn't an American plane opening up with a machine-gun.

Then the beached ship seemed to blow up. A mass of thick smoke covered her from stem to stern, and bits of plating flew heavily through the air, and there were a few lurid bursts of flame. Sergeant Walpole suddenly remembered that there ought to be survivors, only he hadn't seen anybody diving overboard to try to get ashore. He half-started forward. . . .

Then the sea-breeze blew this smoke, too, away from the wreckage. And the tramp was gone, but there was something else left in its place—so that Sergeant Walpole took one look, and swallowed a non-existent something that came up instantly into his throat again, and remembered the urgent thing he had to do.

"Pete," he said calmly, "you hunt up the Area Officer an' tell him what you seen. Here! I'll give you a report that'll keep 'em from slammin' you in clink for bein' drunk. Grab a monocycle somewheres. It's faster than a car, the way you'll be travelin'. First telephone you come to that's workin', make Central put you in the tight beam to headquarters. Then go on an' report, y'self. See?"

Pete started, and automatically fumbled with his limp and useless arm. Then he carefully tucked the unmanageable hand in the pocket of his uniform blouse.

"That don't matter now," he said absurdly.

He was looking at the thing left in place of the tramp, as Sergeant Walpole scribbled on one of the regulation report-forms of the Eastern Coast Observation Force. And the thing he saw was enough to upset anybody.

WHERE the tramp had been there was a single bit of bow-plating sticking up out of the surf, and a bunch of miscellaneous floating wreckage drifting sluggishly toward the beach. And there was a solid, rounded, metallic shape apparently quite as long as the original tramp had been. There was a huge armored tube across its upper part, with vision-slits in two bulbous sections at its end. There were gun-ports visible here and there, and already a monstrous protuberence was coming into view midway along its back, as if forced into position from within. Where the bow of the tramp had been there were colossal treads now visible. There was a sort of conning-tower,

armored and grim. There was a ghastly steel beak. The thing was a war-machine of monstrous size. It emitted a sudden roaring sound, as of internal-combustion engines operating at full power, and lurched heavily. The steel plates of the tramp still visible above water, crumpled up like paper and were trodden under. The thing came toward the shore. It slithered through the shallow sea, with waves breaking against its bulging sides. It came out upon the beach, its wet sides glittering. It was two hundred feet long, and it looked somehow like a gigantic centipede.

It was a tank, of sorts, but like no tank ever seen on earth before. It was the great-grandfather of all tanks. It was so monstrous that for its conveyance a ship's hull and superstructure had been built about it, and its own engines had been the engines of that ship. It was so huge that it could only be landed by blasting away a beached ship from about itself, so it could run under its own power over the fragments to the shore.

Now it stopped smoothly on the sandy beach, in which its eight-foot-wide steel treads sank almost a yard. Men dropped down from ports in its swelling sides. They made swift, careful inspections of predetermined points. They darted back up the ladders again. The thing roared once more. Then it swung about, headed for the sand-dunes, and with an extraordinary smoothness and celerity disappeared inland.

PART II

". . . The Wabbly was meant for one purpose, the undermining of civilian morale. To accomplish that purpose it set systematically about the establishment of a reign of terror; and so complete was its success that half the population of a state was in headlong flight within two hours. It was, first, mysterious; secondly, deadly, and within a very few hours it had built up a reputation for invincibility. Judged on the basis of its first twelve hours' work alone, it was the most successful experiment of the war. Its effect on civilian morale was incalculable." (*Strategic Lessons of the War of 1941-43.* —U. S. War College. Pp. 80-81.)

TWO of the members of Observation-Post Fourteen gaped after the retreating monster. Sergeant Walpole scribbled on the official form. Just as the monstrous thing dipped down out of sight there was a vicious, crashing report from its hinder part. Something shrieked. . . .

Sergeant Walpole got up, spitting sand. There was blood on the report-form in his hand. He folded it painstakingly. Of the two men who had been with him, one was struggling out of the sand as Sergeant Walpole had had to do. The other was scattered over a good many square yards of sandy beach.

"Um. They seen us," said Sergeant Walpole, "an' they got Pete. You'll have to take this report. I'm goin' after the damn thing."

"What for?" asked the other man blankly.

"To keep it in sight," said Sergeant Walpole. "That's tactics. If somebody springs somethin' you ain't able to fight, run away but keep it in sight an' report to the nearest commissioned officer. Remember that. Now get on. There's monocycles in the village. Get there an' beat that damn Wabbly thing with the news."

He saw his follower start off, sprinting. That particular soldier, by the way, was identified by his dog-tag some days later. As nearly as could be discovered, he had died of gas. But Sergeant Walpole picked up one of the two rifles, blew sand out of the breech-mechanism, and started off after the metal monster. He walked in the eight-foot track of one of its treads. As he went, he continued the cleaning of sand from the rifle in his hands. The rifle was useless against

such a monster, of course, but it is quaint to reflect that in that automatic rifle, firing hexynitrate bullets, each equivalent to a six-pounder T.N.T. shell in destructiveness, Sergeant Walpole carried greater "fire-power" than Napoleon ever disposed in battle.

THE tread of the Wabbly made a perfect roadway. Presently Sergeant Walpole looked up to find himself scrutinizing somebody's dining-room table, set for lunch. The Wabbly had crossed a house in its path without swerving. Walls, chimneys, timbers and planks, all had gone beneath its treads. But they had been pressed so smoothly flat that until Sergeant Walpole looked down at his footing, he would not have known he was walking on the wreckage of a building.

It was half an hour before he reached the village. The Wabbly had gone from end to end, backed up, and gone over the rest of it again. There was the taint of gas in the air. Sergeant Walpole halted outside the debris. His gas-mask had been blown to atoms with Observation-Post Fourteen.

"They're tryin' to beat the news o' their comin'," he reflected aloud, "which is why they smashed up the village. The telephone exchange was there. . . . Tillie's under there somewheres. . . ."

He fumbled with the rifle, suddenly swearing queerly hate-distorted oaths. Tillie had not been the great love of Sergeant Walpole's life. She was merely a country telephone operator, reasonably pretty, and flattered by his uniform. But she was under a mass of splintered wood and crushed brickwork, killed while trying to connect with the tight beam to Area Headquarters to report the monster rushing upon the village. That monster had destroyed the little settlement. There was nothing left at all but wreckage and the eight-foot tracks of monster treads. Sometimes those tracks crossed each other. Between them wreckage survived to a height of as much as four feet, which was the clearance of the Wabbly's body.

Something roared low overhead. Sergeant Walpole swore bitterly, looked upward, and waited to die. But the small plane was American, and old. It was a training-plane, useless for front-line work. It dived to earth, the pilot waved impatiently, and Walpole plunged to a place beside him. Instantly thereafter the plane took off.

"What was it?" shouted the pilot, sliding off at panic-stricken speed across the tree-tops. "They heard the bombs go off all the way to Philly. Sent me. What in hell was it?"

A THIN, high, wailing sound coming down as lightning might be imagined to descend. . . . The pilot dived madly and got behind a pine forest before the explosion and the concussion that followed it. Sergeant Walpole saw the pine-trees shiver. The sheer explosion-wave of that egg, if it hit an old ship like this in mid-air, would have stripped the fabric from its wings.

"Set me down," said Sergeant Walpole. "They're watchin' us from aloft. I sent a man on a monocycle to report." But he told luridly of the thing that had come ashore, and of its destructiveness. "Now set me down. Gimme a gas-mask an' clear out. You ain't got a burglar's chance of gettin' back."

The pilot set him down, and began ticking away on a code sender even as he landed. Then he climbed swiftly away from the Sergeant, headed in a weaving, crazy line to westward. Then things screamed downward and the Sergeant clapped hands over his ears once more. The

ground quivered underfoot, though the eggs landed a good three-quarters of a mile away. The training-plane dropped like a plummet. The sharpness of a hexynitrate explosion carries its effect to quite incredible distances. The fabric of its wings split to ribbons. The ship landed somewhere and smoke rose from it.

"He shouldn't ha' gone up so high," said Sergeant Walpole.

He struck across country for the treads of the Wabbly once more. He saw a school-house. The Wabbly had passed within a hundred yards of it. The school-house seemed deserted. Then the Sergeant saw the hole in its roof. Then he caught the infinitely faint taint of gas.

"Mighty anxious," said Sergeant Walpole woodenly, "not to let news get ahead of 'em. Yeah. . . . If it busts on places without warnin', it'll have that much easier work. I hope I'm in on the party when we get this damn thing."

There was no use in approaching the school-house, though he had a gas-mask now. Sergeant Walpole went on.

PART III

". . . The Wabbly made no attempt to do purely military damage. The Enemy command realized that the destruction of civilian morale was even more important than the destruction of munitions factories. In this, the Enemy displayed the same acumen that makes the war a fruitful subject of study to the strategic student." (*Strategic Lessons of the War of 1941-43.*—U. S. War College. Pp. 81-82.)

AT nightfall the monster swerved suddenly and moved with greater speed. It showed no lights. It did not even make very much noise. Then the second flight of home-defense planes made their attack. Sergeant Walpole heard them droning overhead. He lit a fire instantly. A little helicopter dropped from the blackness above him and he began to heap dirt desperately on the blaze.

"Who's there?" demanded a voice.

"Sergeant Walpole, Post Fourteen, Eastern Coast Observation," said the Sergeant in a military manner. "Beg to report, sir, that the dinkus that brought down the other ships is housed in that big bulge on top of the Wabbly."

"Get in," said the voice.

The Sergeant obeyed. With a purring noise the helicopter shot upward. Then something went off in mid-sky, miles ahead, where a faint humming noise had announced the flight of attack-planes. A lurid, crackling detonation lit up the sky. One of the ships of the night-flying squadron. From the helicopter they could see the rest of the flight limned clearly in the flash of the explosion. Instantly thereafter there was another such flash. Then another.

"Three," said the voice beside Sergeant Walpole. Another flash. "Four. . . ." The invisible operator of the screw-lifted ship was very calm about it. "Five. Six." The explosions lit the sky. Presently he said grimly. "That's all of them. I'd better report it."

HE was silent for a while. Sergeant Walpole saw his hand flicking a key up and down in the faint light of radio bulbs.

"Now shoot the works," said the helicopter man evenly. "All the ships that attacked this afternoon went down. One of them started to report, but didn't get but two words through. What did that damned thing use on them?"

"A dinkus on top, sir," said Sergeant Walpole formally. "I'd found a monocycle, sir, and was trailing the thing. I'd come to the top of a hill and seen it moving through a pine-wood, crashing down the trees in front of it like they wasn't there. Then a egg came down from Gawd-knows-where up aloft. I stopped up my ears, thinkin' it was

aimin' for me. Then I seen the ships. Two of 'em were fallin'. They landed, an' I heard a coupla other explosions. Little ones, they sounded like."

The helicopter man's wrist was flicking up and down.

"Little ones!" he said sardonically." Those ships were carrying five-hundred-pound bombs! It was those you heard going off!"

"Maybe," conceded Sergeant Walpole. "There was twenty or thirty ships flyin' in formation, goin' hell-for-leather for the Wabbly. They were trailin' it from the air. They were comin', natural, for me, because I was between them an' it. Then my pants caught on fire—"

"What?"

"My pants caught on fire," said Sergeant Walpole, woodenly. "I was sittin' on the monocycle, tryin' to figure out which way to duck. An' my pants caught on fire. The bike was gettin' hot. I climbed off it an' it blew up. My rifle was hot, too, an' I chucked it away. Then I saw a ship go down, on fire. The Wabbly'd stopped still an' it didn't fire a shot. I'll swear to that. Just my monocycle got hot an' caught on fire, an' then a ship busted out in flames an' went down. A couple more eggs come down an' three ships dropped. Didn't hit 'em. The concussion blew the fabric off 'em. Another one caught fire an' crashed. Then another one. I looked, an' saw the next one catch. Then the next. It was like a searchlight beam hittin' 'em. They flamed up, blew up, an' that was that. The last two tried to get away, but they lit up an' crashed."

THE pilot's hand flicked up and down, interminably. There was the steady fierce down-beat of the slip-stream from the vertical propellers. The helicopter swept forward in a swooping dash.

"The whole east coast's gone crazy," said the 'copter man drily. "Crazy fools trying to run away. Roads jammed. Work stopped. It leaked out about the planes being wiped out to-day, and everybody in three states has heard those eggs going off. You're the only living man who's seen that crawling thing and lived to tell about it. I've sent your stuff back. What's that about the thing on top?"

"I hid," said Sergeant Walpole, woodenly. "The Wabbly sent over gas-shells where the ships landed. Then it went on. Headin' west. It's got a crazy-lookin' dinkus on top like a searchlight. That moved, while the ships were catchin' fire an' crashin'. Just like a searchlight, it moved an' the ships went down. But the Wabbly didn't fire a shot."

The helicopter man's wrist flexed swiftly. . . .

"Gawd!' said Sergeant Walpole in sudden agony. "Drop! Quick!"

The helicopter went down like a stone. A propeller shrieked away into space. Metalwork up aloft glowed dully red. Then there were whipping, lashing branches closing swiftly all around the helicopter. A jerk. A crash. Stillness. The smell of growing things all about.

"Well?" said the 'copter pilot.

"They turned it on us—whatever it is," said Sergeant Walpole. "They near got us, too."

A MATCH scratched. A cigarette glowed. The Sergeant fumbled for a smoke for himself.

"I'm waiting for that metal to cool off," said the helicopter pilot. "Maybe we can take off again. They located us with a loop while I was sending your stuff. Damn! I see what they've got!"

"What?"

"A way of transmitting real power in a radio beam," said the 'copter man. "You've seen eddy-current stoves. Everybody cooks with 'em

nowadays. A coil with a high-frequency current. You can stick your hand in it and nothing happens. But you stick an iron pan down in the coil and it gets hot and cooks things. Hysterisis. The same thing that used to make transformer-cores get hot. The same thing happens near any beam transmitter, only you have to measure the heating effect with a thermo-couple. The iron absorbs the radio waves and gets hot. The chaps in the Wabbly can probably put ten thousand horsepower in a damned beam. We can't. But any iron in the way will get hot. It blows up a ship at once. Your monocycle and your rifle too. Damn!"

He knocked the ash off his cigarette.

"Scientific, those chaps. I'll see if that metal's cool."

Something whined overhead, rising swiftly to a shriek as it descended. Sergeant Walpole cowered, with his hands to his ears. But it was not an earth-shaking concussion. It was an explosion, yes, but subtly different from the rending snap of hexynitrate.

"Gas," said the Sergeant dully, and fumbled for his mask.

"No good," said the 'copter man briefly. "Vesicatory. Smell it? I guess they've got us. No sag-suits. Not even sag-paste."

The Sergeant lit a match. The flame bent a little from the vertical.

"There's a wind. We got a chance."

"Get going, then," said the 'copter man. "Run upwind."

SERGEANT WALPOLE slid over the side and ran. A hundred yards. Two hundred. Pinewoods have little undergrowth. He heard the helicopter's engines start. The ship tried to lift. He redoubled his speed. Presently he broke out into open ploughed land.

In the starlight he saw a barn, and he raced toward that. Someone else plunged out of the woods toward him. The helicopter-engine was still roaring faintly in the distance. Then a thin whine came down from aloft. . . .

When the echoes of the explosion died away the pilot was grinning queerly. The helicopter's engine was still.

"I said it could be done! Pack of fat-heads at Headquarters!"

"Huh?"

"Picking up a ship by its spark-plugs, with a loop. They're doing that up aloft. There's a ship up there, forty thousand feet or so. Maybe half a dozen ships. Refueling in air, I guess, and working with the thing you call a Wabbly. When I started the 'copter's engine they got the spark-impulses and sighted on them. We'd better get away from here."

"Horses in here," said Sergeant Walpole. "The Wabbly came by. No people left."

They brought the animals out. The horses reared and plunged as there were other infinitely sharp, deadly explosions of the eggs coming down eight miles through darkness.

"Let's go. After the Wabbly?" said the 'copter man.

"O' course," said Sergeant Walpole. "Somebody's got to find out how to lick it."

They went clattering through darkness. It was extraordinary what desolation, what utter lack of human life they moved through. They came to a town, and there was a taint of gas in the air. No lights burned in that town. It was dead. The Wabbly had killed it.

PART IV

". . . which panic was enhanced by the destruction of a second flight of fighting planes. However, the destruction of Bendsboro completed civilian demoralization. . . . A newscasting company re-

broadcast a private television contact with the town at the moment the Wabbly entered it. Practically all the inhabitants of the Atlantic Coast heard and saw the annihilation of the town—hearing the cries of '*Gas!*' and the screams of the people, and hearing the crashings as the Wabbly crushed its way inexorably across the city, spreading terror everywhere. . . . Frenzied demands were made upon the Government for the recall of troops from the front to offer battle to the Wabbly. . . . It is considered that at that time the one Wabbly had a military effect equal to at least half a million men." (*Strategic Lessons of the War of 1941-43.* —U. S. War College. Pp. 83-84.)

THEY did not enter the town. There was just enough of starlight to show that the Wabbly had gone through it, and then crashed back and forth ruthlessly. There was a great gash through the center of the buildings nearest the edge, and there were other gashes visible here and there. Everything was crushed down utterly flat in two eight-foot paths; and there was a mass of crumbled debris four feet high at its highest in between the tread-marks.

They looked, silently, and went on. They reached a railroad track, the quadruple track of a branch-line from New York to Philadelphia. The Wabbly was going along that right-of-way. There was no right-of-way left where it had been. Rails were crushed flat. Culverts were broken through. But the horses raced along the smoothed tread-trails. Once a broken, twisted rail tore at Sergeant Walpole's sleeve. Somehow the last great plate of a tread had bent it upward. Presently they saw a mass of something dark off to the left. Flames were licking meditatively at one of the wrecked cars.

Then they heard explosions far ahead. Flames lighted the sky.

"Our men in action!" said Sergeant Walpole hungrily.

He flogged his mount mercilessly. Then the sky became bright in the distance. The horses, going down the crushed-smooth trail of the treads, gained upon the din. Then they saw the cause of it, miles distant. A train was burning luridly. Its forepart was wreckage, pure and simple. The rest was going up in flames and detonations. Munitions, of course. The Wabbly was off at one side, flame-lit and monstrous, sliding smoothly out of sight.

"TEN miles of railroad," said the 'copter pilot calmly, "mashed out of existence. That's going to scare our people into fits. They can drop eggs till the cows come home, and every egg'll smash up a hundred yards of right-of-way, and we can build it back up again in four hours with mobile track-layers. But ten miles to be regraded and laid is different. Half of America will be imagining all our railroads smashed and starvation ahead."

A piercing light fell upon them.

"Shut it off!" roared Sergeant Walpole. "D'y'want to get us killed?"

He and the 'copter pilot swerved. There was a car there, a huge two-wheeled car, whose gyroscopes hummed softly while its driver tried to extract it from something it was tangled in.

"I commandeer this car," said the 'copter pilot. "Military necessity. We have to trail that Wabbly."

Someone grunted. Lights flashed on within. The 'copter pilot and Sergeant Walpole stiffened to attention. The stars of a major-general shone on the collar of the stout man within.

"Beg pardon, sir," said the pilot, and was still.

"Umph," said the major-general. "There seem to be just four of us alive who've seen the thing clearly. I hit on it by accident, I'll admit. What do you know about it?"

"It come on a tramp-steamer—" began Sergeant Walpole.

"Hm. You're Sergeant Walpole. Mentioned in dispatches to-morrow, Sergeant. You, sir?"

"Its weapon against our planes, sir," said the 'copter man precisely, "is a radio beam carrying several thousand horsepower of energy. When it hits iron, sir, the energy is absorbed and the iron heats up and blows up the ship. The Wabbly's working with a bomber well aloft, sir, which spots planes from below by picking up their spark-plug flashes in a directional loop. The bomber aloft, sir, drops eggs when the Wabbly's attacked. Sergeant Walpole reports several planes disabled by their fabric being blown off their wings."

"I KNOW," said the major-general. "Dammit, the front takes every ship that's fit to go aloft. We have only wrecks back here. You're sure about that spark-plug affair?"

"Yes, sir," said the 'copter pilot. "My ship crashed, sir. I started the motors again, trying to take off. Eggs began to drop about me instantly."

"Nasty!" said the major-general. "I was going to join my men. We've flung a line of artillery ahead of the thing. Motor-driven, of course. But if they can pick up motors by the spark-waves, the bomber knows all about it. Nasty!"

He lit a cigar, calmly. The gyrocar shifted suddenly and backed away from the thing it had been tangled in.

"Why ain't the bombers been shot down?" demanded Sergeant Walpole angrily. "Dammit, sir, if it wasn't for them bombers—"

"Up to an hour ago," said the major-general, "we had lost sixty-eight planes trying to get those bombers. You see, it works both ways. The bombers drop eggs to help the Wabbly defend itself. And the Wabbly uses that power-beam you spoke of to wipe the sky clean about the bombers. I wondered how it was done, before you explained, sir. Do you men want to come with me? Get on the running-board if you like. We shall probably be killed."

The gyrocar purred softly away, with two horses left wandering and two men clinging fast in a sweep of wind. They found a ribbon of concrete road and the wind sang as the car picked up speed. Then, suddenly, it bucked madly and went out of control, and, as suddenly, was passing along the road again. The Wabbly had passed over the roadway here.

AND then they heard gunfire ahead. Honest, malevolent gunfire. Flashes lit the horizon. The gyrocar speeded up until it fairly hummed, and the wind rushed into the nostrils and mouths of the men on the running-boards. The cannonade increased. It reached really respectable proportions, until it became a titanic din. As the road rose up a long incline, a shell burst in mid-air in plain view, and the driver of the gyrocar jammed on the brakes and looked down upon the strangest of sights below.

There were other hills yet ahead, and from behind them came that faint, indefinite glow which is the glow of the lights of a city. At the bottom of a valley, a mile and a half distant, there was the Wabbly. Star-shells flared near it, casting it into intolerable brightness and clear relief. And other shells were breaking upon it and all about it. From beyond the rim of hills came the flashes of guns. The air was full of screamings and many crashes.

The Wabbly was motionless. It looked more than ever like a monstrous, deadly centipede. It was under a rain of fire that would have shattered a dreadnaught of the 1920's. Its monstrous treads were motionless. It seemed queerly

quiescent, abstracted; it seemed less defiant of the shellfire that broke upon it like the hail of hell, than indifferent to it. Yes, it seemed indifferent!

Only the queer excrescence on its top moved, and that stirred vaguely. Star-shells floated overhead and bathed it in pitiless light. And it remained motionless. . . . Sergeant Walpole had a vague impression of colossal detonations taking place miles above his head, but the sound was lost in the drumfire of artillery nearer at hand.

THEN a gun on the Wabbly moved. It spouted a flash of bluish flame, and then another and another. It seemed to fire gas-shells into the town, at this moment, ignoring the batteries playing upon it. It was still again, while the queer excrescence on its back moved vaguely and shells burst about it in a very inferno.

Then the treads moved, and with a swift celerity the Wabbly moved smoothly forward and up the incline toward the cannonading guns. It went over the top of the incline, and those in the gyrocar saw its reception. Guns opened on it at point-blank range. Now the Wabbly itself went into action. In the light of star-shells and explosions they saw its guns begin to bellow. It went swiftly and malevolently forward, moving with centipedean smoothness.

It dipped out of sight. The cannonade lessened. Two guns stopped. Three. . . . Half a dozen guns were out of action. A dozen guns ceased to fire. . . . One last weapon boomed desperately at its maximum rate of fire. . . .

That stopped. The night became strangely, terribly still. The major-general put aside his radivision receiver. Though neither the helicopter pilot nor Sergeant Walpole had noticed it, he had opened communication the instant the gyrocar came to a stop. Now the major-general was desperately, terribly white.

"The artillery is wiped out," he observed detachedly. "The Wabbly, it seems, is going on into the town."

They did not want to listen, those men who waited futilely by the gyrocar which had witnessed the invulnerability of the Wabbly to all attack. They did not want to listen at all. But they heard the noises as the Wabbly crashed across the town, and back and forth.

"Moral effect," said the major-general, through stiff lips. "That's what it's for. To break down the morale behind the lines. Good God! What hellish things mere words can mean!"

PART V

". . . The only weak spot in the Wabbly's design, apparently, was the necessity of using its entire engine-power in the power-beam with which it protected itself and its attendant bombers from aerial attack. For a time, before New Brunswick, it was forced to remain still, under fire, while it fought off and destroyed an attacking fleet eight miles above it. With sufficiently powerful artillery, it might have been destroyed at that moment. But it was invulnerable to the artillery available. . . . Deliberately false statements were broadcast to reassure the public, but the public was already skeptical, as it later became incredulous, of official reports of victories. The destruction of New Brunswick became known despite official denials, and colossal riots broke out among the inhabitants of the larger cities, intent upon escape from defenseless towns. . . . Orders were actually issued withdrawing a quarter of a million men from the front-line reserve, with artillery in proportion to their force." (*Strategic Lessons of the War of 1941-43.*—U. S. War College. P. 92.)

THE major-general left them at the town, now quite still and silent. Sergeant Walpole said detachedly:

"We'll prob'ly find a portable sender, sir, an' trail the Wabbly. That's about all we can do, sir."

"It looks," said the major-general

rather desperately, "as if that is all anybody can do. I'm going on to take command ahead."

The 'copter pilot said politely:

"Sir, if you're going to sow mines for the Wabbly—"

"Of course!"

"That power-beam can explode them, sir, before the Wabbly gets to them. May I suggest, sir, that mine-cases with no metal in them at all would be worth trying?"

"Thank you," said the major-general grimly. "I'll have concrete ones made."

Sergeant Walpole grunted suddenly.

"Look here, sir! The Wabbly stops when it uses that dinkus on top. This guy here says it uses a lotta power—four or five thousan' horsepower."

"More likely ten or twenty," said the 'copter pilot.

"Maybe," said Sergeant Walpole profoundly, "it takes all the power they got to work that dinkus. They were workin' it just now when the artillery was slammin' 'em. So next time you want to tackle it, stick a flock o' bombs around an' attack the bombers too. If they're kept busy down below, maybe the planes can get the bombers, or otherwise they'll get a chance to use a big gun on the Wabbly."

The major-general nodded.

"We four," he observed, "are the only living men who've actually seen the Wabbly and gotten away. I shall use both your suggestions. And I shall not send those orders by radio—not even tight-beam radio. I'll carry them myself. Good luck!"

A non-commissioned officer of the Eastern Coast Observation Force and a yet uncommissioned flying cadet waved a cheerful good-by to the major-general in charge of home defense in three states. Then they went on into the town.

"Monocycles first," said Sergeant Walpole. "An' a sender."

THE 'copter man nodded. The street-lights of the town dimmed and brightened. The Wabbly had paused only to create havoc, not to produce utter chaos. It had gone back and forth over the town two or three times, spewing out gas as it went. But most of the town was still standing, and the power-house had not been touched. Only its untended Diesels had checked before a fuel-pump cleared.

They found a cycle-shop, its back wall bulged in by wreckage against it. Sergeant Walpole inspected its wares expertly. A voice began to speak suddenly. A television set had somehow been turned on by the crash that bulged the back wall.

"The monster tank has been held in check," said a smug voice encouragingly. "Encountered by home-defense troops and artillery, it proved unable to face shell-fire. . . ."

"Liars!" said the 'copter man calmly. He picked up the nearest loose object and flung it into the bland face of the official news-announcer. The television set went dead, but there were hissings and sputterings in its interior. He had flung a Bissel battery at it, one of a display-group, and its high-tension terminals hissed and sparked among the stray wires in the cabinet.

"That makes me mad," said the 'copter man grimly. "Lying for morale! The other side murders our civilians to break down morale, and our side lies about it to build morale back up again. To hell with morale!"

Sergeant Walpole reached in and pulled out the battery. Bissel batteries turn out six hundred volts these days, and they make a fat spark when short-circuited.

"For Gawd's sake!" said Sergeant Walpole. "If they can pick up sparks from a motor, can't they pick 'em up from this? What the hell y'doin'? Y'want 'em droppin' eggs on us? Say!"

HE stopped short, his eyes burning. He began to talk, suddenly groping for words while he waved the high-powered small battery in his hand. The helicopter man listened, at first skeptically and then with an equally hungry enthusiasm.

"Sergeant," he said evenly, "that's an idea! A whale of an idea! A hell of a fine idea! Lets get some rockets!"

"Why rockets?" demanded Sergeant Walpole in his turn. "Whatcha want to do? Celebrate the Fourth o' July?"

The 'copter man explained, this time, and Sergeant Walpole seized upon the addition. Then they began a hunt. They roved the town over, and it was not pleasant. When the Wabbly had gone into that town there had still been very many living human beings in it. Some of them had believed in the ability of the artillery to defend the town against a single monster. Some had had no means of getting away. But all of them had tried to get away when the Wabbly went lurching in among the houses.

For them, the Wabbly had spewed out deadly gases. Also it had simply forged ahead. And the two living men in their gas-masks paid as little attention as possible to the bodies in the streets, most of them in flimsy night-clothing, struck down in frenzied flight. but they could not help seeing too much. . . .

In the end they went back to the artillery-positions and found signal-rockets there. Two full cases of them, marvelously unexploded. A little later two monocycles purred madly in the beaten-down paths of the monstrous treads. Sergeant Walpole bore very many Bissel batteries, which will deliver six hundred volts even on short-circuit for half an hour at a time. The 'copter man carried some of them, too, and both men were loaded down.

WHEN dawn came they were hollow-eyed and gaunt and weary. It had started to rain, too, and both of them were drenched. They could see no more than a couple of hundred yards in every direction, and they were hungry, and they had seen things no man should have to look upon, in the way of destruction. They came upon a wrecked artillery-train just as the world lightened to a pallid gray. Guns twisted and burst. Caissons, no more than shattered scraps of metal, because of the explosion of the shells within them. And the tread-tracks of the Wabbly led across the mess. Steam still rose, hissing softly, from the bent and twisted guns which had burst when they were heated to redness by the power-beam. And there was a staff gyrocar crumpled against a tree where it had been flung by some explosion or other. There were neither sound nor wounded men about; only dead ones. The Wabbly had been here.

"Hullo," said the helicopter man in a dreary levity, "there's a portable vision set in this car. Let's call up the general and see how he is?"

Sergeant Walpole spat. Then he held up his hand. He was listening. Far off in the drumming downpour of the rain there was a rumbling sound. He had heard it before. It was partly made up of the noise of internal-combustion engines of unthinkable power, and partly of grumbling treads forcing a way through reluctant trees. It was a long way off, now, but it was coming nearer.

"The Wabbly," said Sergeant Walpole. "Comin' back. Why? Hell's bells! Why's it comin' back?"

"I don't know," said the 'copter man, "but let's get some rockets fixed up."

The two of them worked almost lackadaisically. They were tired out. But they took the tiny Bissel bat-

teries and twisted the attached wires about the rocket-heads. They had twenty or thirty of them fixed by the time the noise of the Wabbly was very near. There was the noise of felled trees, pushed down by the Wabbly in its progress. Great, crackling crashes, and then crunching sounds, and above them the thunderous smooth purring rumble of the monster. The 'copter man climbed into the upside-down staff car. He turned the vision set on and fiddled absurdly with the controls.

"I'm getting something," he announced suddenly. "The bomber up aloft is sending its stuff down a beam, a tight beam to the Wabbly. Listen to it!"

THE uncouth, clacking syllables of the enemy tongue came from the vision set. Someone was speaking crisply and precisely somewhere. Blurred, indistinct flashes appeared on the vision set screen.

"They ought to be worried," the 'copter man said wearily. "Even an infra-red telescope can't pick up a damned thing through clouds like this. And the Wabbly's in a mess without a bomber to help. . . ."

Sergeant Walpole did not reply. He was exhausted. He sat looking tiredly off through the rain in the direction of the approaching noise. Somehow it did not occur to him to run away. He sat quite still, smoking a soggy cigarette.

Something beaked and huge appeared behind a monstrous oak-tree. It came on. The oak-tree crackled, crashed, and went down. It was ground under by the monstrous war-engine that went over it. The Wabbly was unbelievably impersonal and horrible in its progress. There had been a filling-station for gyrocars close by the place where the artillery-train had been wrecked. One of the eight-foot treads loomed over that station, descended upon it—and the filling-station was no more. The Wabbly was then not more than a hundred yards from Sergeant Walpole, less than a city block. He looked at it in a weary detachment. It was as high as a four-story house, and it was two hundred feet long, and forty feet wide at the treads with the monstrous gun-bulges reaching out an extra ten or fifteen feet on either side above. And it came grumbling on toward him.

PART VI

". . . Considered as a strategic move, the Wabbly was a triumph. Eighteen hours after its landing, the orders for troops called for half a million men to be withdrawn from the forces at the front and in reserve, and munitions-factories were being diverted from the supply of the front to the manufacture of devices designed to cope with it. This, in turn, entailed changes in the front-line activities of the Command. . . . Altogether, it may be said that the Wabbly, eighteen hours after its landing, was exerting the military pressure of an army of not less than half a million men upon the most vulnerable spot in our defenses—the rear. . . . And when its effect upon civilian morale is considered, the Wabbly, as a force in being, constituted the most formidable military unit in history." (*Strategic Lessons of the War of 1941-43.*—U. S. War College, Pp. 93.)

AS Sergeant Walpole saw the Wabbly, there was no sign of humanity anywhere about the thing. It was a monstrous mass of metal, powder-stained now where shells had burst against it, and it seemed metallically alive, impersonally living. The armored tube with vision-slits at its ends must have been the counterpart of a ship's bridge, but it looked like the eye-ridge of an insect's face. The bulbous control-rooms at the ends looked like a gigantic insect's multi-faceted eyes. And the huge treads, so thick as to constitute armor for their own protection, were so cunningly joined and sprung that they, too, seemed like part of a living thing.

It came within twenty yards of the staff-car with the 'copter man in it and Sergeant Walpole smoking outside. It ignored them. It had destroyed all life at this place. And Sergeant Walpole alone was visible, and he sat motionless and detached, unemotionally waiting to be killed. The Wabbly clanked and rumbled and roared obliviously past them. Sergeant Walpole saw the flexing springs in the tread-joints, and there were hundreds of them, of a size to support a freight-car. He saw a refuse-tube casually ejecting a gush of malodorous stuff, in which the garbage of a mess-table was plainly identifiable. A drop or two of the stuff splashed on him, and he smelled coffee.

And then the treads lifted, and he saw the monstrous gas-spreading tubes at the stern, and the exhaust-pipes into which he could have ridden, monocycle and all. Then he saw a man in the Wabbly. There were ventilation-ports open at the pointed stern and a man was looking out, some fifteen feet above the ground, smoking placidly and looking out at the terrain the Wabbly left behind it. He was wearing an enemy uniform cap.

THE monster went on. The roar of its passing diminished a little. And the 'copter man came suddenly out of the staff-car, struggling with the portable vision set.

"I think we can do it," he said shortly. "It's in constant beam communication with a bomber up aloft, and I think they're worried up there because they can't see a damned thing. But it's a good team. With the Wabbly's beam, which takes so much power no bomber could possibly carry it, the bombers are safe, and the bombers can locate any motor-driven thing that might attack the Wabbly and blow it to hell. But right now they can't see it. So I think we can do it. Coming?"

Sergeant Walpole threw away his cigarette and rose stiffly. Even those few moments of rest had intensified his weariness. He flung a leg over the monocycle's seat and pointed tiredly to the trail of the Wabbly. It nearly paralleled, here, a ribbon of concrete road which once had been a reasonably important feeder-highway.

"Let's go."

They went off through the rain along the road, nearly parallel to the route the Wabbly was taking. Rain beat at them. Off in the woods to their right the Wabbly's noise grew louder as they overtook it. They passed it, and came abruptly out of the wooded area upon cultivated fields, rolling and beautifully cared-for. There had been a farm-headquarters off to one side, a huge central-station for all the agricultural work on what once would have been half a county, but there were jagged walls where buildings had been, and smoke still rose from the place.

Then the Wabbly came out of the woods, a dim gray monstrous shape in the rain.

THE helicopter man pulled the ignition-cord and a rocket began to sputter. He made a single wipe with his knife-blade along the twisted insulated wires of the Bissel battery, and a wavering blue spark leaped into being. The rocket shot upward, curved down, and landed with enough force to bury its head in the muddy ploughed earth and conceal the signal-flare that must have ignited.

"That ought to do it," said the 'copter man. "Let's send some more."

Sergeant Walpole got exhaustedly off his monocycle and duplicated the 'copter man's efforts. A second rocket, a third. . . . A dozen or more rockets went off, each one bearing a wavering, uncertain blue spark at

its tip. And that spark would continue for half an hour or more. In a loop aerial, eight miles up, it might sound like a spark-plug, or it might sound like something else. But it would not sound like the sort of thing that ought to spring up suddenly in front of the Wabbly, and it would sound like something that had better be bombed, for safety's sake.

The Wabbly was moving across the ploughed fields with a deceptive smoothness. It was drawing nearer and nearer to the spot where the rockets had plunged to earth.

It stopped.

Another rocket left the weary pair of men, its nearly flashless exhaust invisible in the daytime, anyway. The Wabbly backed slowly from the irregular line where the first rockets sparked invisibly. It was no more than a distinct gray shadow in the falling rain, but the queer bulk atop its body moved suddenly. Like a searchlight, the power-beam swept the earth before the Wabbly. But nothing happened.

The 'copter man turned on the vision set he had packed from the staff gyrocar. Voices, crisp and anxious, came out of it. He caressed the set affectionately.

"Listen to 'em, Sergeant," he said hungrily. "They're worried!"

THE voice changed suddenly. There was a sudden musical buzzing in the set, as of two dozen spitting sparks, in as many tones, all going at once.

"Letting the guys in the Wabbly hear what they hear," said the 'copter man grimly. "If God's good to us, now. . . ."

The voices changed again. They stopped.

The Wabbly itself was still, halted in its passage across a clear and rain-swept field by little sparking sounds which seemed to indicate the presence of something that had better be bombed for safety's sake.

A thin whining noise came down from aloft. It rose to a piercing shriek, and there was a gigantic crater a half mile from the Wabbly, from which smoke rose lazily. The Wabbly remained motionless. Another whining noise which turned to a shriek. . . . The explosion was terrific. It was a bit nearer the Wabbly.

"We'll send 'em some more rockets," said the 'copter man.

They went hissing invisibly through the rain. The Wabbly backed cautiously away from the spot where they landed, because they were wholly invisible and they made a sound which those in the Wabbly could not understand. Always, to a savage, the unexplained is dangerous. Modern warfare has reached the same high peak of wisdom. The Wabbly drew off from the sparks because it could not know what made them, and because it had used its power-beam and the bomber had dropped its bombs without stopping or destroying them. It was not conceivable to anybody on either the Wabbly or the bombers aloft that inexplicable things could be especially contrived to confront the Wabbly, unless they were contrived to destroy it.

"They don't know what in hell they're up against," said the 'copter man joyously. "Now lets give 'em fits!"

ROCKETS went off in swift succession. To the blinded men in the bomber above the clouds it seemed that unexplained mechanisms were springing into action by dozens, all about the Wabbly. They were mechanisms. They were electric mechanisms. They were obviously designed to have some effect on the Wabbly. And the Wabbly had no defense against the unguessed-at effects of unknown weapons except. . . .

Bombs began to rain from the sky. The Wabbly crawled toward the last gap left in the ring of mysterious mechanisms. That closed. Triumphant, singing sparks sang viciously in the amplifiers. Nothing was visible. Nothing! Perhaps that was what precipitated panic. The bombers rained down their deadly missiles. And somebody forgot the exact length of time it takes a bomb to drop eight miles. . . .

Sergeant Walpole and the 'copter man were flat on the ground with their hands to their ears. The ground bucked and smote them. The unthinkable violence of the hexynitrate explosions tore at their nerves, even at their sanity. And then there was an explosion with a subtle difference in its sound. Sergeant Walpole looked up, his head throbbing, his eyes watering, dizzy and dazed, and bleeding at the nose and ears.

Then he bumped into the 'copter man, shuddering on the ground. He did it deliberately. There was a last crashing sound, and some of the blasted earth spattered on them. But then the 'copter man looked where Sergeant Walpole pointed dizzily.

The Wabbly was careened crazily on one side. One of its treads was uncoiling slowly from its frame. Its stern was blown in. Someone had forgotten how long it takes a bomb to drop eight miles, and the Wabbly had crawled under one. More, from the racked-open stern of the Wabbly there was coming a roaring, spitting cloud of gas. The Wabbly's storage-tanks of gas had been set off. Inside, it would be a shambles. Its crew would be dead, killed by the gas the Wabbly itself had broadcast in its wake. . . .

PART VII

". . . It is a point worth noticing, by any student of strategy, that while the Wabbly in working solely for effectiveness in lowering civilian morale worked upon sound principles, yet the destruction of the Wabbly by Sergeant Walpole and Flight Cadet Ryerson immediately repaired all the damage done. Had it worked toward more direct military aims, its work would have survived it. It remains a pretty question for the student, whether the Enemy Command, with the information it possessed, made the soundest strategic use of its unparalleled weapon. . . . But on the whole, the raid of the Wabbly remains the most startling single strategic operation of the war, if only because of its tremendous effect upon civilian morale. . . ." (*Strategic Lessons of the War of 1941-43.*—U. S. War College. Pp. 94-96.)

A MAJOR-GENERAL climbed out of a staff gyrocar and waded through mud for half a mile, after which he, in person, waked two sleeping men. They were sprawled out in the puddle of rain which had gathered in a torn-away tread from the Wabbly. They waked with extreme reluctance, and then yawned even in the act of saluting in a military manner.

"Yes, sir;" said Sergeant Walpole, yawning again." Yes, sir; the bombers've gone. We heard 'em tryin' to raise the Wabbly for about half an hour after she'd blown up. Then they cut off. I think they went home, sir. Most likely, sir, they think we used some new dinkus on the Wabbly. It ain't likely they'll realize they blew it up themselves for us."

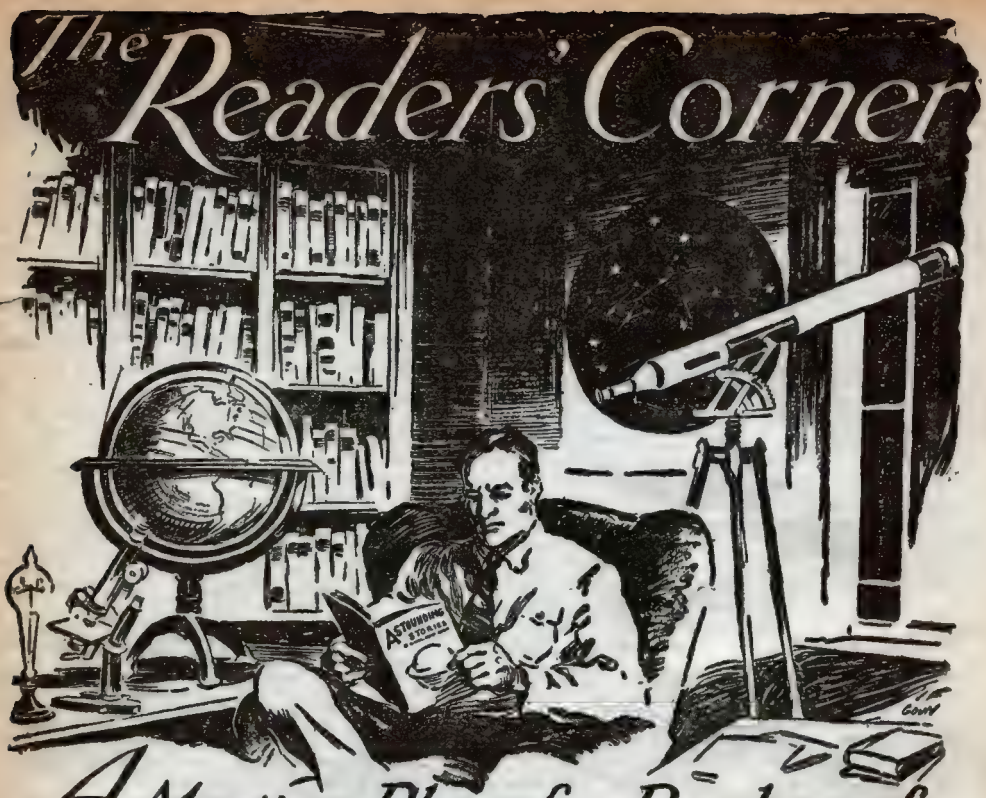
The major-general gave crisp orders. Men began to explore the Wabbly, cautiously. He turned back to the two sleepy and disreputable men who had caused its destruction. His aspect was one of perplexity and admiration.

"What did you men do?" he demanded warmly. "What in hell did you do?"

Sergeant Walpole grinned tiredly. The 'copter man spoke for him.

"I think, sir," said the helicopter man, "that we affected the morale of the Wabbly's and the bombers' crews."

The Readers' Corner



A Meeting Place for Readers of Astounding Stories

"To Put It Mildly"

Dear Editor:

I'm a comparatively new Reader of Astounding Stories and this is my initial letter to the "Corner." I've just finished your August number, and to say that I'm crazy about this new serial "Brood of the Dark Moon," sequel to "Dark Moon," is putting it mildly. Y'see, my first A. S. was the May number, and I thought that Mr. Diffin was some Author. "The Death Cloud," by that incomparable pair, Schachner and Zagat, "When Caverns Yawned," by Capt. Meek, "When the Moon Turned Green," by Hal Wells and the second installment of "The Exile of Time" I enjoyed immensely! It was the most complete magazine I've ever read.

I'd like to open correspondence with a lot of the A. S. readers around the age of 15.—Harry Glick, 40 Hall St., North Adams, Mass.

Fairy Tales?

Dead Editor:

For several years I have found keen delight and diversion in the reading of a class of literature, Science Fiction, which, to me, surpasses all other classes of modern literature in imagination, novelty and, in most cases, probability. For this purpose, I have closely followed Astounding Stories.

It was my opinion that this magazine is published for persons of mature age, but judging by some of the representative stories published recently, this is not so. In each issue there has been one or two stories which would clearly come under the category of a "fairy tale," being cloaked only in the veil of a few scientific terms or theories.

Usually, I should say, the fault has been merely in the manner in which the story has been written, and appears as though the Author had but recently finished one of Grimm's tales. Why not get away from some of this childish heroism, these romantic meetings of the hero and the lovely girl from the moon?

Take the story "The Danger from the Deep," in the August issue. "When he came to his senses again, he was lying in a bed in a small room. Bending over him was the sweetest feminine face that he had ever seen," etc. If that does not sound like a paragraph out of a sweet fairy tale, what does? All through the story, we have a love tale written in a very absurd manner. While the plot of the story itself is no more absurd than any other Science Fiction, one is impressed with the absurdity of the manner in which it is written.

Then again, we have the same, identical plot worked over and over again, story after story. What Science Fiction needs is new plots, new settings, new characters, etc. All fairy tales are distinguished by the fact that they are all more or less concerned with a prince and a princess, begin "Once upon a time" and end "They lived happily ever after.'

Persons reading Science Fiction have been presumed to have outgrown this sort of thing.—John Wolf Leon, 2456-20th St., N. W., Washington, D. C.

From a "Female Critic"

Dear Editor:

I have conceived the brilliant (?) idea of writing to you, and am preparing to do so.

Although only fifteen, I am interested in science but I must admit I know next to nothing about it. I'm one of those "female critics"—dubbed so by Mr. Roche of Cal. It's quite evident that neither he nor Jim Nicholson really know any of the female readers of "our" mag.

Don't change the size of A. S. It's very convenient to carry and is just right for the bookcase.

As for Astounding Stories' place among Science Fiction magazines, why, can't you see that it is far ahead? Your Authors and artists are the best. Diffin is a marvel. After reading the first installment of "Brood of the Dark Moon," I'm positive that it will be a masterpiece.

Farley's stories usually interest me, but "The Danger from the Deep" was terrible.

If anyone wishes to correspond with me their letters will be received with open arms. Especially those about Science Fiction.—Muriel L. Craft, 615 Main Street, Avoca, Penna.

Thank You

Dear Editor:

I have followed Astounding Stories with keen satisfaction since its first number. I've never written in before to praise the stories because that would be in the nature of painting the lily.

However, I want to thank you for the many pleasant hours this magazine has afforded me. May it continue to do so till the trees that it's made from are gone!—Edward Warner, 2014 Morris Ave., Bronx, N. Y.

Wants Colored Illustrations

Dear Editor:

This is the first time I have written to any magazine. I've been reading Astounding Stories ever since it came out, and instead of saving them I pass 'em on so all the other boys can get plenty of enjoyment out of your mag. I have just finished the latest issue of your or "our" Astounding Stories, and I have it resting underneath this letter that I am writing to you.

Boy, of all the mags I've ever read—and they number many—this one outranks them all, as a general outranks a buck private. That sequel to "The Dark Moon" is a wow! It's just what I've been waiting for. Diffin certainly came out strong with his sequel. I guess everyone will be satisfied.

You have a good collection of stories this time, but can't you get more interplanetary stories? I like them rather keenly.

H. G. Winter's "The Midget from the Island" was excellent, and so were the other stories.

One thing more. Say, does it cost you much money to get colored illustrations? Why can't you have a few extras by Paul put in for good measure?

I certainly would appreciate it if some of you Astounding Stories fans, both male and female, would write to me.—Paul Dean, 225 Roxbury St., Clifton Forge, Va.

Likes the "Corner"

Dear Editor:

I have just started reading A. S. with the April number. "The Readers' Corner" is very interesting to me, and is the first thing I read.

I can find no brickbats to throw in your direction, for I think the magazine is O. K. Don't make any changes in the book, the pages are all right the way they are. I have no difficulty in turning them and the stories are all so interesting that I can't wait for the next issue to come out.

Wesso is a good artist, and your Authors are great. Arthur J. Burks sure did a good job on "Manape the Mighty," and Ray Cummings' "The Exile of Time" was swell all the way through. "Brood of the Dark Moon" looks like another good story from Charles Willard Diffin.

Astounding Stories is not the only Science Fiction magazine I read, but I think it is the best.

Well, I guess I'll sign off now, hoping this letter gets in the "Corner."—Sheldon Seehase, 414 Dewey Ave., Buffalo, N. Y.

A Welcome to Paul

Dear Editor:

Although I am not a constant Reader of Astounding Stories, I am confident that when I do pick up the magazine I will find extra-fine stories throughout its pages.

I find in your June, 1931, issue that you finally gave a good artist a break. "Earthman's Burden," by R. F. Starzl was illustrated by Paul. Not meaning that Wesso is not good; but I am glad to see my favorite artist's work in your magazine.

One reason why I like your magazine so well is that you print so many stories

by Ray Cummings. You seem to have more stories by him than any other publication.—Joe Kucera, 7102 So. 37th St., Omaha, Nebr.

Mistake?

Dear Editor:

I have been a Reader of your magazine for quite a while, and believe you lead them all with the best Authors and illustrators. There is one thing about Wesso's work, however, which very nearly spoils the story for me. The Author describes the hero as being strong and athletic and then Wesso ruins it by drawing him thin to the point of emaciation. His monsters and mechanical contrivances cannot be equaled.

There is one apparent mistake in the story by R. M. Farley, "The Danger from the Deep." Abbot switched off his now useless light and began to record all these unbelievable events. This is virtually Mr. Farley's statement. At that depth Abbot would not have been able to see his hand in front of his face, much less see well enough to write. However, this small mistake doesn't affect the story, which was very good.—Richard G. Eads, 2221 Ave. I, Galveston, Tex.

Announcement

Dear Editor:

May I use the "Corner" to draw to the attention of English Readers the formation of the Ilford Science Literary Circle? This circle, which we hope will become a national organization, is progressing slowly but surely, and I am trying to start a branch in Liverpool; but to do this it is essential that we obtain the material support and not merely the sympathy of British Science Fiction fans. We intend to have a library of Science Fiction and other features. I urge any British Readers to attempt to organize branches in their own towns by writing to the Science Fiction magazines and their local newspapers asking for members. By this means we hope to increase and multiply with branches all over the country, but it must be emphasized that we *must* have the support of Science Fiction enthusiasts. The address of the Secretary of the Ilford branch is Mr. Walter H. Gillings, 123 Grove Green Rd., Leytonstone, London, E. 11, who will be pleased to receive any inquiries.—Leslie J. Johnson, 46 Mill Lane, Old Swan, Liverpool, Lancs., Eng.

"Little Improvement"

Dear Editor:

I have just been looking over your magazine, Astounding Stories, and I notice that it has made little improvement during the nearly two years of its existence. I see room for little improvement, however, unless it is that you could start an editorial department, a science discussion department, start answering letters that you publish of your Readers, or make all the pages even, so that you would not turn twenty pages every time you tried to turn one or two.

There's one point to "our" mag that should in time put it as one of the newsstand leaders, and that is the fine array of Authors: Capt. S. P. Meek, R. F. Starzl, S. P. Wright, Ray Cummings, Harl Vincent, Paul Ernst, H. K. Wells—what Authors! I particularly like S. P. Wright's John Hanson series, and Capt. S. P. Meek's Dr. Bird series. Ray Cummings stands out in my mind for his "Beyond the Vanishing Point" and "The Exile of Time."

Edmond Hamilton's "Monsters of Mars" was a great story, and would have been greater if it was not such an almost exact copy of "The World Without a Name" appearing in another Science Fiction mag some time ago.

I think that, in my opinion, the worst story that you ever published was "The Ape-men of Xlotli" and the best story through your magazine so far was "The Gate to Xoran."—Charles Hornig, Jr., 213 Orchard St., Elizabeth, N. J.

Evaluations

Dear Editor:

Astounding Stories is getting better and better, which is something I cannot say for most mags.

In the August issue the best story was "If the Sun Died," by R. F. Starzl. Mr. Starzl's stories are all very good, but he far outdid himself this time. It was one of the best short stories I have ever read. "The Midget from the Island" was also very good. "The Port of Missing Planes" was better than most of Meek's stories, most of which are "not so hot."

In the September issue all of the stories were good. "The Copper-Clad World" was one of the best stories I have ever read written by Vincent. The only story of his that can compare with it was "Vagabonds of Space."

"Devil Crystals of Arret" and "The Sargasso of Space" were excellent. "The God in the Box" was the best story about Commander Hanson I have ever read. The first two installments of "Brood of the Dark Moon" were excellent. The serial promises to be a fitting sequel to "Dark Moon."

Why not an editorial in every issue, and scientific questions and answers.—Bill Bailey, Aquabista, St. Michaels, Talbot Co., Md.

But Why Murder Grandfather?

Dear Editor:

A word about "our" mag. I have been a constant Reader since you first started to publish it, and have enjoyed every issue.

There is only one kind of Science Fic-

tion story that I dislike, and that is the so-called time-traveling. It doesn't seem logical to me. For example: supposing a man had a grudge against his grandfather who is now dead. He could hop in his machine and go back to the year that his grandfather was a young man and murder him. And if he did this how could the revenger be born? I think the whole thing is the "bunk."

There is one thing I would like to see in "our" mag, and that is an editorial on some scientific phase.

I would like to correspond with anyone interested in science or scientific fiction around my age, which is seventeen.—John Delaney, Campbell Rd., Syracuse, N. Y.

"Growth of a Nation"

Dear Editor:

Since I started reading your wonderful magazine, it has certainly improved. It has been like watching the growth of a nation. When one looks back on its early issues with its lurid covers, uncut edges and spooky stories, and then glances at the September number—well, it looks like a different book!

Say, who is helping Wesso, anyway? I don't see how one man could draw such covers. But his inside pictures are not so good, nothing like Paul's.

Of the Authors, I like best Victor Rousseau, R. F. Starzl, Arthur J. Burks, Murray Leinster, Paul Ernst, Charles W. Diffin, S. P. Meek and Harl Vincent.

Stories like "The Pirate Planet," "Fifth Dimension Catapult," "The World Behind the Moon," and "The Atom Smasher," and others will always be remembered.—Daniel L. McPhail, 109 S. E. 25th St., Oklahoma City, Okla.

Well Explained

Dear Editor:

I noticed in the August issue of the magazine a request for an explanation of space flier propulsion from Mr. Crowson, and that prompted this attempt on my part to break into the "Corner." In an attempt to help Mr. Crowson, I will suggest that he observe the action of a high-powered rifle or an ordinary shotgun when it is fired. He advances in his letter the idea that the exhaust of the rocket or combustion tube or nozzle of the space flier must have some body of gas or similar formation upon which to get its "push." If he will observe as I suggest the recoil of a gun, he will find that said recoil is induced in the greater part by the backward thrust of the expanding gases as they rush forward. The principle of the space flier's rocket or nozzle is practically identical. The energy generated with its thrust in the opposite direction to that of the travel of the expanding gases is the force that theory tells us will force the ship ahead.

An experiment can be made by placing a Roman candle in a suitable bell jar with an electric spark gap fitted to it. Pump the air from the bell jar and when the powder charge is ignited the candle will, without any apparent footing, be propelled rapidly to the other end of the jar. A hitch can be pointed out in this experiment in the fact that it is not possible to obtain a perfect vacuum, but the peculiar behavior of the candle proves conclusively that a footing of atmosphere or other matter is not necessary to the propulsion of small bodies, at least.

This should, in a certain degree, give us evidence that there are possibilities in the space flier.

The Editor invites brickbats, but I am not at present in possession of any grouch at the mag. All I can ask along that line is just keep up the good work.—John Gervais, Burns, Ore.

As Bad as That?

Dear Editor:

Say, what kind of a creature is this Clyone in Harl Vincent's "The Copper-Clad World"? In Chapter Two she raises her finger and some missile of destruction leaps forth to kill one of her subjects. Again in chapter four a poisoned dart shoots forth and kills another man.

Does she have hollow tubes for fingers, or is she herself some kind of a highly developed machine for killing one's worst enemies?

Well, I just want to tell you that I have been reading Science Fiction and Weird Fiction for a period of twelve years and have never yet come across a magazine to equal yours in that time.

Everybody is raving about how wonderful your covers are, and yet I cannot see a thing in them. As a matter of fact, I think you have the worst staff of artists I have ever seen. However, your Authors do more than their share in making up for the bad work of your authorized *executioners* of art.—Capt. R. L. Merrick, Philadelphia, Pa.

Looking for Trouble

Dear Editor:

While it is but recently that I became a Reader of your excellent magazine, I cannot resist the temptation to barge into your "Corner." Your indefatigable seekers after errors provoke my amusement. After all, what matters an error or so when one is dealing in planets, solar systems, nebulae and the like? Faced with the stupendous task of transporting his hero and heroine from this prosaic earth to a planet that doesn't exist, or to the weird jungles of one of the much abused atoms, can a poor Author be blamed for the occasional use of unorthodox methods? Personally, I have reached the point where the peculiar methods of tunnelling used by Meek's talpidae, or the personal idiosyncrasies of Farley's cerebrally overdeveloped fish, excite me not at all.

After all, it's craftsmanship, not material, that counts. The story's the thing, and the telling of it. And nowhere is craftsmanship more important than in the short story, where space is at a premium and every word is important. Craftsmanship such as is shown in Wright's "The God in the Box"—and as is not shown in Farley's recent fish story.

And, by all means, retain at least the present small amount of "S. A.," "love," or whatever you choose to call it. Personally, I have little respect for the space voyager who omits to take his sweetie along, or, barring that, fails to find one enroute.

I would like—in spite of the possibility that I may involve myself in a battle royal—to recommend to the more militant of the science enthusiasts the letter from Female Woman Harrison of Angola. I'm afraid the desire to escape from reality is what makes Readers of a distressingly large number of us.—W. E. Cunningham, Box 2126, Fort Benning, Ga.

A Far-Reaching Giant

Dear Editor:

I have just read the May edition of your superb magazine. It is the best magazine I have ever set eyes on. I would like to notify Booth Cody that it was the magnificent illustration of the March issue which first attracted my attention to A. S. Since then I have been a faithful and interested Reader of the same. I have not yet read one of the stories that has met with my disapproval; in fact, I have been highly delighted with the majority of them.

I hope this letter finds a little space in "The Readers' Corner" as it was your extended invitation that encouraged me to write to you.—Alex Redpath, 482 St. Georges Rd., Glasgow, Scotland.

Correspondents Wanted

Dear Editor:

Six months ago was the memorable date that I first started reading your magazine, and I haven't missed an issue since. My only regret is that I didn't start reading it sooner.

Practically every letter in the "Corner" contains one or more brickbats; personally, I can think of none. Imagine what the magazine would be like if the Editor complied with the wishes of *all* the Readers! [Just imagine!—Ed.]

Your stories, with the exception of a few, were splendid.

A great many contributors to "The Readers' Corner" rave over the artists. I think they are good, but nothing to go into raptures about. Wesso's best cover, in my estimation, was the one illustrating a scene from "Beyond the Vanishing Point."

I would enjoy corresponding with other Science Fiction Readers.—William P. J. Smith, 3103 Fifth Ave., Chicago, Ill.

Potpourri

Dear Editor:

The September issue of Astounding Stories was very good. The cover was finely done—the best I have seen by Wesso, I think. Why not have interplanetary scenes for all the covers? Wesso's drawings for the ships and space-suits were very good. The background, however, should have had more stars.

The stories also were very good. "The Copper-Clad World"—I enjoyed this story, although it was not as good as I expected from Vincent. And here I am with my same old objection: "There wasn't enough science in it." However, I like your stories even if there isn't, so from now on I'm going to shut up and keep shut-up on the science-in-the-stories question.

"Devil Crystals of Arret" was an average story. I think most of those trans-dimensional stories are the bunk. "Brood of the Dark Moon"—an excellent story. It gets better with every issue. C. W. Diffin is certainly a good Author. His stories are very thrilling, and the science—awk—Beg pardon—I mean they are exceedingly well-written. More from him.

"The Sargasso of Space"—great, excellent, wonderful, superior. . . . I could give you a mile-long string of adjectives like this, and still I wouldn't be able to tell you how much I liked this story. No foolin'.

"The God in the Box" wasn't so good. I'm not much in favor of the John Hanson stories, anyway.

Regarding time-traveling, I agree with Jim Nicholson absolutely. The only way time-traveling will ever be possible is by suspended animation. Time machines are absurd. I notice that we aren't getting so many stories of this type lately. Keep up the good work.

I've read the letters of a few people who don't want kickers. Wake up! If it weren't for the criticisms "The Readers' Corner" would fail to be interesting and would merely be a repetition of the same old thing!

And I wanna yell again for a quarterly. Yes, I'm glad Strange Tales is here—and why not have a Strange Tales quarterly, too?

(Heavens! Worse and more of it, Ed.!) [Yes.—Ed.]—Carlyle J. Bessette, Charlotte, Vt.

"Not Astounding at All"

Dear Editor:

I want to criticize the choice of the cover scene for the September issue. It is a picture of a fight between two men. Fights have occurred since this world began, and probably will continue till the end of it. Other magazines not dealing

with Science Fiction have pictures like this, and to an old Reader of Astounding Stories and other magazines the fact that this particular fight is in space is not astounding at all.

I think some scene such as in "The Copper-Clad World," where the Earthmen and the Llotta are trying to escape from the room of the giant rocket-tube after the disastrous charge has been exploded, with the breech of the great tube glowing white in the background, would interest old Readers more, and be just as good for the purpose of capturing new ones.—Robert Baldwin, 359 Hazel Ave., Highland Park, Ill.

The Slammers Slammed

Dear Editor:

I have been reading A. S. for some time, and now I just have to say something about "The Sargasso of Space," by Edmond Hamilton. I think Mr. Hamilton puts into this story some very fine characters and real action combined with science. I also like Ray Cummings and Hal K. Wells. In fact, I like all your Authors.

And now I want to say something to those hard guys who are always slamming good Authors. If they could do one-fifth as well as any Author you've got, they would be bragging so much you'd think they had found Atlantis.

And of course those guys who are always complaining about the edges must be keeping your mags for keepsakes instead of reading.

Here's good luck to Strange Tales!—Leon Hoskin, Brohman, Mich.

Right on the Chin

Dear Editor:

I hope that what I have to say concerning your publication will not offend you. Anyway, I can hardly blame you for not placing it in discussion as letters of this type just naturally have to be excluded, it seems.

To begin with, let me state frankly that I do not consider Astounding Stories the best in its field by any means. Two others always eclipse it. Why? Because they both contain more and better science than does your magazine. This is not a mere statement, but a fact, as that contained in A. S. is so confusedly mixed with a lavish amount of pseudo-science as to be unrecognizable except by those Readers who already know. As a remedy, I suggest a questionnaire. Certainly, the presence of one would not impair the magazine any!

Recently I found to my horror that a new magazine, Strange Tales, was coming from your company; due, I suppose, to the success of Astounding Stories. Sa-ay! Are you trying to run a perfectly good subject in the ground for purely commercial gain?

Now let *me* suggest something. Instead of publishing another magazine, why in the world don't you spend the time and money improving the one you already have. As I take seven already, I just simply can't afford another. It would be entirely too much of a strain on my pocketbook and eyes.

Think it over, Mr. Editor.—W. R. Baker, 800 N. 1st St., Seminole, Okla.

"The Readers' Corner"

All readers are extended a sincere and cordial invitation to "come over in 'The Readers' Corner'" and join in our monthly discussion of stories, authors, scientific principles and possibilities—everything that's of common interest in connection with our Astounding Stories.

Although from time to time the Editor may make a comment or so, this is a department primarily for *Readers*, and we want you to make full use of it. Likes, dislikes, criticisms, explanations, roses, brickbats, suggestions—everything's welcome here; so "come over in 'The Readers' Corner'" and discuss it with all of us!

—*The Editor.*

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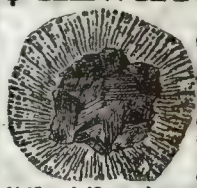

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Tobacco Redeemer contains no habit-forming drugs of any kind. It is in no sense a substitute for tobacco. After finishing the treatment, there should be no desire to use tobacco again or to continue the use of the remedy. In case the treatment is not perfectly satisfactory, we will gladly refund any money paid. It makes not a particle of difference how long tobacco has been used, how much it is used, or in what form—whether it is cigars, cigarettes, pipe, plug, fine cut or snuff. In most cases, Tobacco Redeemer removes all craving for tobacco in any form in a very few days. And remember, it is offered with a positive money-back guarantee. Write today for our free booklet showing the injurious effect of tobacco upon the human system and convincing evidence that Tobacco Redeemer has relieved the craving for tobacco in thousands of cases.

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These are steady positions. Strikes, poor business conditions, or politics will not affect them. Government employees get their pay for twelve full months every year.

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Railway Postal Clerks get $1,900 the first year, being paid on the first and fifteenth of each month. $79.17 each pay day. Their pay is quickly increased, the maximum being $2,700 a year; $112.50 each pay day.

Railway Postal Clerks, like all Government employees, have a yearly vacation of 15 working days (about 18 days). On runs they usually work 3 days and have 3 days off duty or in the same proportion. During this off duty and vacation their pay continues just as though they were working. They travel on a pass when on business and see the country. When they grow old, they are retired with a pension.

City Mail Carriers, Post Office Clerks

Clerks and Carriers now commence at $1,700 a year and automatically increase $100 a year to $2,100 and $2,300. They also have 15 days' paid vacation. City residence is unnecessary.

Customs and Immigrant Inspector

Salary $2,100 to $3,300. Men 21 to 45. Work connected with examining immigrants and merchandise entering the country from foreign ports.

Is Your Job Steady?

Compare these conditions with your present or your prospective condition, perhaps changing positions frequently, no chance to sight for PERMANENT employment; frequently out of a position and the year's average salary very low. DO YOU GET $1,900 EVERY YEAR? HAVE YOU ANY ASSURANCE THAT A FEW YEARS FROM NOW YOU WILL GET $2,100 to $2,700 A YEAR?

You Can Get Them

Experience is usually unnecessary and political influence is not permitted. Let us show you how.

Get Free List of Positions

out the following coupon. Tear it off and mail it today—now, at once.

This investment of two cents for a postage stamp may result in your getting a government job.

FRANKLIN INSTITUTE, Dept. J-271, Rochester, N. Y.

Rush to me entirely free of charge (1) a full description of the position checked below; (2) Free Copy of 32-page book, "How to Get a U. S. Government Job"; (3) A list of the U. S. Government Jobs now obtainable; (4) Tell me how to get Government Job.

- ☐ Railway Postal Clerk.....($1,900-$2,700)
- ☐ Post Office Clerk.....($1,700-$2,300)
- ☐ City Mail Carrier.....($1,700-$2,100)
- ☐ Rural Mail Carrier.....($2,100-$2,400)
- ☐ Government Clerk—File Clerk.....($1,260-$2,000)
- ☐ Inspector of Customs.....($2,100-$3,300)
- ☐ Prohibition Agent.....($2,100-$2,850)
- ☐ Immigrant Inspector.....($2,100-$3,000)

Name.....

Address.....

Use This Coupon Before You Misplace It

NEW LOW PRICES

GOODRICH-GOODYEAR
Firestone - U.S.
AND OTHER TIRES

Lowest Prices on Earth!
Through our organized efforts, users all over the U.S.A. Our 16 years of business speaks for itself. This big responsible company will supply you with reconstructed standard make tires at lowest prices in history. Guaranteed to give full mileage. Service

Don't Delay—Order Today

CORD Tires

Size	Tires	Tubes
30x3	$2.30	$1.00
30x3½	2.90	1.50
31x4	3.90	1.75
32x4	4.00	1.75
33x4	4.10	1.75
34x4	4.20	1.75
35x4	4.30	1.75
32x4½	4.50	1.85
33x4½	4.60	1.85
34x4½	4.70	1.85
35x4½	4.80	1.85
36x4½	4.90	1.85

BALLOON Tires

Size	Tires	Tubes
29x4.40	$3.30	$1.75
30x4.50	3.40	1.75
29x4.50	3.50	1.80
30x4.50	3.60	1.80
31x4.50	3.70	1.80
28x4.75	3.80	1.80
29x4.75	3.90	1.80
30x4.75	4.00	1.80
31x4.75	4.10	1.80
32x4.75	4.20	1.80
33x4.75	4.30	1.80
34x4.75	4.40	1.80
35x4.75	4.50	1.80
30x5.00	4.60	1.80
31x5.00	4.70	1.80
32x5.00	4.80	1.80
33x5.00	4.90	1.80
34x5.00	5.00	1.80

All Other Sizes

Send only $1.00 deposit with each tire ordered. We ship balance C. O. D. Deduct 5 per cent if cash in full accompanies order. Three fabric to give 12 months service will be replaced at half price.

DEALERS WANTED

YORK TIRE & RUBBER COMPANY, Dept. 1143
3856 Cottage Grove Ave. Chicago, Illinois

BE AN INVESTIGATOR

Make secret investigations. Work home territory. If you have natural ability and a desire for the work experience is unnecessary. Write today for particulars.

Northern Detective & Identification Bureau
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MONEY FOR YOU AT HOME

YOU can earn good money in spare time at home making display cards. No selling or canvassing. We instruct you, furnish complete outfit and supply you with work. Write to-day for free booklet.
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Many people with defective hearing and Head Noises enjoy conversation, go to Theatre and Church because they use Leonard Invisible Ear Drums which resemble Tiny Megaphones fitting in the Ear entirely out of sight. No wires, batteries or head piece. They are inexpensive. Write for booklet and sworn statement of the inventor who was himself deaf.

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Learn to MOUNT BIRDS

Be an expert Taxidermist. We teach you at home by Mail to mount Birds, Animals, Game Heads; to tan skins. Mount wild game also common animals, squirrels, rabbits, frogs and pet dogs. Big Profits in spare time.

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ELECTRICITY, easily learned in 12 weeks, brings immediate, well-paid employment to the *trained* man; and the opportunity to forge ahead in his own business. McSweeny Training is *all* practical. No books! No lessons! No correspondence! Actual, practical training on real equipment. Write today for Free Book completely describing the 12 weeks course and the New Low Tuition Offer.

McSWEENY'S, Dept. E-22-12, Cleveland, Ohio

Something New!

At last there is something really new under the sun—a "costume" magazine—one devoted to stories of glamorous romance and adventure in all lands and all times.

Soldiers of Fortune

is its name. You will like it a lot. It's 25c the copy, and on sale at all newsstands.

New Discovery "NO-FROST" OFFERS CHANCE TO MAKE $6 A DAY, PROFIT

Here is a new money-making idea for ambitious workers. It offers a chance to make $6 to $9 a day in full time—$1.00 to $2.00 an hour in spare time. All you need to do is take care of orders in your territory for No-Frost—a remarkable new preparation that is guaranteed to keep steam, frost, fog, rain, sleet, mist and snow off auto windshields, street-car windows, show windows, mirrors, eyeglasses, etc. Keeps glass clean, bright and clear *in all kinds of weather.*

BIG MONEY FOR AMBITIOUS WORKERS

you do is demonstrate to auto owners, taxicab and companies, stores, garages, housewives, etc., and the orders. We don't sell to dealers. All business from your locality must come through you. You get the *profit on every order.* Every demonstration leads to an order. Just put a little No-Frost on the glass. It won't streak, smear, mar or scratch, yet it keeps glass clean and clear as crystal. A necessity for every auto owner, storekeeper, street-car motorman, taxicab and bus driver, locomotive engineer, housewife, and everyone who wears glasses.

arek Cleared $100 in a Single Week

dreds of my Representatives are making handsome profits with No-Frost and my r fast-selling specialties. H. L. Lenz, of New York, reports profits of $38.45 7½ hours. Wm. Newcomb, 63 years makes as high as $80 a week. And L. Jewel Hackett, of Ohio, cleared $39 7 hours—more than she made in two le weeks in a factory. These big earns of a few of my Representatives show wonderful possibilities. Is there any on why you can't do as well?

SEND NO MONEY

Just put your name and address on the coupon and send it to me. I'll present you with facts that show how to start right in making $6 to $9 a day in my Representative. You don't need any capital, training or experience. I tell you just what to do and say in this pleasant, interesting work. It doesn't cost a penny to investigate. Yet you have an opportunity to make some worth-while profits every day—right from the start.

Just Mail Coupon

Introduce No-Frost in your territory while it's new and before imitations are put on sale in stores. If you act quickly you will be given every opportunity to make big money—more money perhaps than you thought possible. At least get the interesting facts. Mail the coupon today—NOW!

Albert Mills, Pres.
8274 Monmouth Ave., Cincinnati, O.
Please send me full details of your new money-making proposition without cost or obligation.

Name.....

Address.....

.....

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RUPTURED

people praise this improved appliance

Forget about rupture pains and the need for constant care and watchfulness. Hold your rupture this secure, sanitary way. This perfected appliance retains rupture safely and with great comfort. Severe pressure is unnecessary and often dangerous. Out-of-door men praise this better way to hold their tures. It binds the separated muscle fibres together. gives absolute freedom in body movement. Over 0,000 Brooks Appliances sold. Write for our 10-day trial offer, and 28-page Rupture klet. Sent in plain sealed envelope.

OKS APPLIANCE CO., 1736 STATE STREET, MARSHALL, MICH.

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We guide you step by step. You can train at home during spare time. Degree of LL. B. conferred. Successful graduates in every section of the United States. We furnish all text material, including fourteen-volume Law Library. Low cost, easy terms. Get our valuable 64-page "Law Guide" and "Evidence" books FREE. Send for them NOW.

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CHURCH STUDIO, Enterprise, Ore.

ORE ACHING FEET

e relief from tired, burning, aching feet. LUMCO OT EASE soothes, cools and relieves the pain in 5 onds. Reduces swelling and perspiration. Pains n corns, bunions and callouses go like magic. This w white hygienic foot cream is greaseless, vanishing antly. Every bit of fire and pain is drawn from the llen, irritated nerves and tissues. LUMCO FOOT SE ends all agonizing foot pains. At Druggists or direct prepaid $1.00. Address LUMCO, Dept. R. mball, Nebr.

AL OPPORTUNITY FOR TRAINED AUTO MECHANICS

TO MECHANICS, easily learned in 8 weeks, brings mediate, full-time employment to the *trained* man; the opportunity to establish his own profitable busia. McSweeny Training is *all* practical. No books! lessons! No correspondence! Actual, practical ining with real tools on real equipment. Write today Free Book and the New Low Tuition Offer. You are obligated.

SWEENY'S, Dept. A-22-12, Cleveland, Ohio

BE A RAILWAY TRAFFIC INSPECTOR

WRITE TODAY

Railways and Bus—Steady Pay Plus Expenses

ACTIVE MEN—19 to 55—needed at once in Railway and Bus Passenger Traffic Inspection. Recent graduates earn up to $250 per month plus expenses. Many R.T.I. men have gone on to executive positions. Interesting, outdoor work—travel or remain near home. We'll train you for this uncrowded profession and on completion of a few weeks' home study, place you in a position paying from $120 to $150 per month up (plus expenses) to start, or refund tuition. Free Booklet tells about this assured opportunity in the field of Transportation. Write today. Standard Business Training Institute, Dpt. 1212, Buffalo, N. Y.

Be A Detective

Make Secret Investigations

Earn Big Money. Work home or travel. Fascinating work. Experience unnecessary. DETECTIVE Particulars FREE, Write NOW to GEO. N. D. WAGNER, 2190 Broadway, N. Y.

When You Feel Old at 40

Beware Kidney Acidity—Often Causes Irritation, Backache, Leg Pains, Nervousness, Stiffness, Breaks Sleep and Hinders Work

You may be in the same fix as thousands of men and women past 40, and many far younger. They feel old, run-down and unable to work their best, simply because their vitality is lowered by functional Kidney inactivity and excess Acidity. When these troubles cause Burning, Bladder Irritation, Leg Pains, Getting Up Nights, Nervousness, Backache, Neuralgia, Lumbago, Stiffness, Circles under Eyes, Muddy Complexion or frequent Headaches, it's time for you to take some special medicine.

To combat these conditions, you really need two different kinds of special medicine, because you need two results in fighting these troubles. First, you need a medicine to act as a stimulant diuretic to the Kidneys, to help them in their function of filtering and purifying the blood, thus reducing acidity. Second, you need another medicine to soothe and heal irritation and give nature a chance.

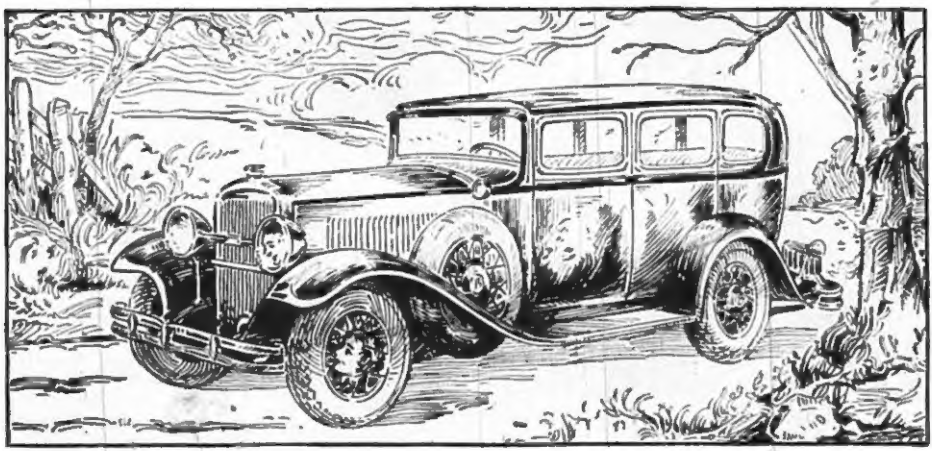
The best drug stores everywhere now have these two special medicines, known as Cystex, and are authorized to distribute them under a guarantee to satisfy completely or cost nothing. They are in tasteless tablet form, easy to take, and pleasant to young or old, yet work so fast they start circulating thru the system in 11 minutes. Many sufferers say they begin to feel marked improvement in the first 24 hours or so.

Your own druggist—the man you know is reliable—can tell you that these are established facts, and that Cystex (pronounced Siss-tex) is a splendid medicine of purest ingredients, and that it has proved a blessing to many sufferers.

To be successful these days you must be a live-wire and full of energy, so it's poor business to try to save a few cents on medicine and take chances of losing days or weeks of needed work. Delay may be very costly. On the other hand, if Cystex makes you feel years younger, stronger and more energetic by combating these conditions, the small cost of 75c is a wonderful investment. But if you are not completely satisfied, you merely return the empty package to get your money back. The guarantee protects you. Ask your druggist for Cystex today.

Win $3,700.00

OR BUICK 8 SEDAN AND $2,500 IN CASH



Can you find 5 faces in the picture?

Sensational money-making opportunity for everybody! You may win $3,700 if you prefer all cash or handsome latest model Buick 8 Sedan and $2,500 in cash. **This offer is made by a prominent business house for advertising purposes. Someone is going to win $3,700—why not you?**

I want to send you this prize. Act quick! Send your answer today and qualify to win.

All you do to qualify for an opportunity in this great cash prize advertising plan is to find five faces in picture.

People riding in the auto above got out of the car. Their faces are shown in odd places about the picture. Some faces are upside down, others look sideways, some look straight at you. If you can pick out 5 or more faces, mark them, clip the picture and send to me together with your name and address. Sharp eyes will find them. Can you?

Easy to Win $12,960.00 in 103 Cash Prizes

We will give away $12,960 in cash. You are sure to profit if you take an active part. In case of ties duplicate prizes will be given. **You get $3,700 if you win grand first prize.** In addition there are 102 other wonderful cash prizes. The winner of the grand second prize may win $2,200, and winner of the grand third prize may win $1,700. Also four other prizes of $500.00 each and many others. All told $12,960 in cash. Money to pay you is already on deposit in the Mercantile Trust and Savings Bank, a big Chicago Bank.

$1,000.00 for Promptness

Send your answer at once. Make sure to qualify for $1,000 extra given for promptness if you win the Buick Sedan—a total of $3,700 if you prefer all cash.

Send No Money The main thing is—send in your answer today. You can share in this advertising cash distribution. Hurry! and take no chance of losing the extra reward of $1,000 for promptness if you win grand first prize. Act now! You don't need to send a penny of your money to win! Just find five faces in the picture above and mail with coupon or write me a letter at once for particulars.

Indiana Farmer Wins $3,500!

This is a picture of Mr. C. H. Essig, Argos, Ind., taken on his farm. He writes: "Wish to acknowledge receipt of your $3,500 prize check. Oh, boy! This is the biggest sum of money I ever had in my hands. It is indeed a fortune to me."

Mrs. Kate Needham, of Oregon, won $4,705.00. Miss Serena Burbach, of Wisconsin, won $1,125. M. D. Reidman of Minnesota, won $2,960. Hundreds of men, women, boys and girls have been rewarded in our past advertising campaigns.

Send Coupon Today

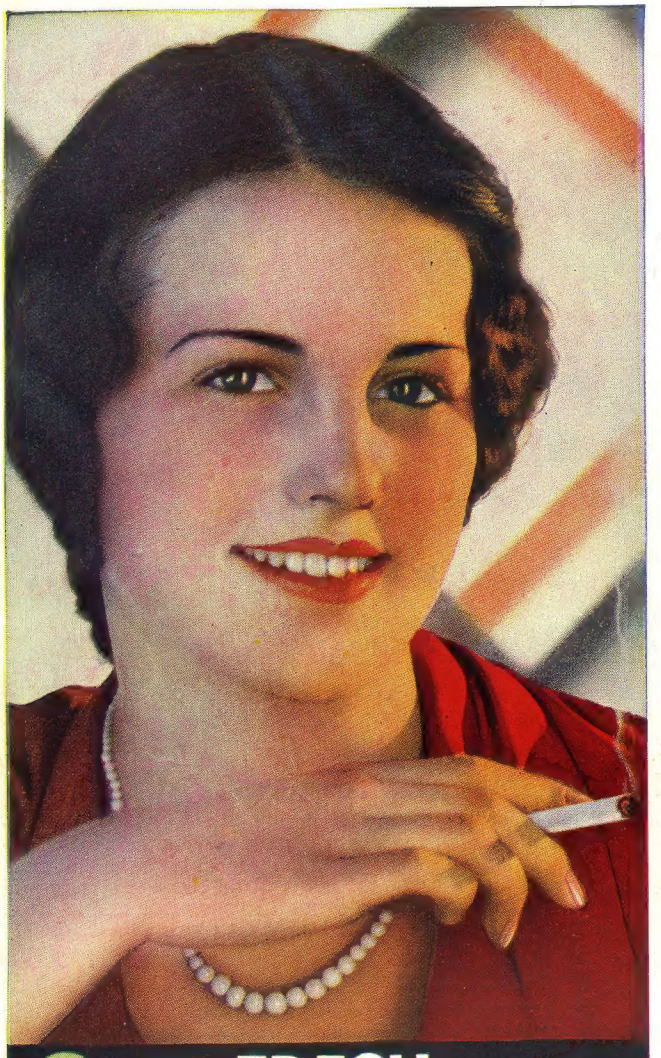
ROGER SCOTT, Mgr.
427 W. Randolph St., Dept. 537, Chicago, Ill.

I have found five faces in the $3,700.00 prize picture and am anxious to win a prize. Please advise me how I stand

Name

Address

Town.. State



Smoke a FRESH cigarette

This year you can give FRESH cigarettes

NEVER before at Christmas could you give what you can send to friends this year—because this is the first Christmas of Camel Cigarettes in the Camel Humidor Pack.

That means you can give the unmatched flavor of fine, clean, dust-free, fragrant tobacco—in cigarettes which *stay fresh* till the last Camel in the last package has been enjoyed.

Contrast that with the bite-and-burn of dried-out or parched dry tobaccos, and you'll know why Camels make such a welcome gift.

No matter how many miles you send them, no matter if someone else happens to send Camels too — the fine Turkish and mild Domestic tobaccos in Camels will keep mild and cool and throat-easy, thanks to the *moisture-proof* wrapping which seals Camel flavor in the Camel Humidor Pack.

Be smart this Christmas. Make your shopping easy — and your gifts welcome by sending Camels straight through the list.

Tune in CAMEL QUARTER HOUR featuring Morton Downey and Tony Wons — Camel Orchestra, direction Jacques Renard — Columbia System—every night except Sunday

● *Don't remove the moisture-proof wrapping from your package of Camels after you open it. The Camel Humidor Pack is protection against perfume and powder odors, dust and germs. Even in offices and homes, in the dry atmosphere of artificial heat, the Camel Humidor Pack delivers fresh Camels and keeps them right until the last one has been smoked*

CAMELS

Mild . . NO CIGARETTY AFTER-TASTE

© 1931, R. J. Reynolds Tobacco Company
Winston-Salem, N. C.